



## PARTS LIST

EFFECTIVE APRIL 1, 1952

# MONOTYPE TYPESETTING MACHINE

THE COMPOSITION TYPE-CASTER

WITH A PREFACE which gives directions for ordering parts and a simple explanation of our method of designating parts.

THIS PARTS LIST is for use with machines 5300 and following. For machines prior to 5300 consult Philadelphia.

MONOTYPE KEYBOARD PARTS are printed separately. A copy of this booklet will be sent on request.

*Lanston Monotype Machine Company, Philadelphia 3, Pennsylvania*



*Monotype Typesetting Machine*

## *Lanston Monotype Machine Company*

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# DIRECTIONS FOR ORDERING PARTS

(A Careful Reading Is Important)

All of these directions are essential. You will save time, trouble and money by reading them carefully before ordering any parts.

If you are not familiar with the Monotype terms here used, read "Designation of Parts" which follow these "Directions for Ordering Parts."

To enable us to fill orders correctly you must give us the following information:

(1) Give the number of the machine for which the part is required (stamped on the Name Plate and also on the Main Stand back of the Air Tower).

(2) Give the name of the part.

(3) Give the symbol of the part (give every character in the symbol exactly as printed—every one means something).

(4) Give the quantity required of each part.

To insure getting the correct name and symbol:

Use the Plate Book in conjunction with this Parts List.

To order a complete attachment for a machine give the number of the machine and the name of the attachment.

## DESIGNATION OF PARTS

(Name)	(Classification)
(Quantity)	(Symbol)
Bridge-leg Screw (side) (2).....	222 1A3

NAME: Shows that these Screws hold the "Leg" to the "Bridge" and go in from the side.

QUANTITY: Two of these Screws; where no quantity is given "1" is understood.

CLASSIFICATION NUMBER: Standard pieces which may be used in several places under different symbols are given classifying numbers; those numbers beginning with "1" are bolts, "2" screws, "3" nuts, "4" washers, "5" dowels, "6" springs, "7" rivets, "8" spring pins and posts, "9" cotters. All pieces having the same classification number are alike without regard to what their symbols may be.

SYMBOL: Identifies and locates the part. The letter "A" indicates that these Screws are in the "A" section (the entire machine being divided into eight sections lettered "A" to "H" inclusive). The figure 1 preceding the letter indicates that these Screws are in the first group of this section (the groups comprising each section being numbered consecutively from one up). The figure 3 following the letter indicates that these Screws are the third pieces of this group (the individual pieces comprising each group being numbered thus consecutively). If a lowercase letter precedes the first figure in the symbol (for example, Stud b1A11) it indicates there have been one or more changes in the piece and the new piece is not interchangeable with the superseded one without changing or altering other parts. If the section letter is repeated as the last character of the symbol (for example, a1AA) it indicates that this piece is furnished only assembled with one or more other pieces, in which case a reference mark and a note at the end of the group gives details for the assembly. When a cap "X" is the first character of a symbol (for example, X1A) it calls for the complete group as listed above it.

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**20B—Type Carrier (continued)**

lever stand.....	a20B1
* rivet (2).....	a20B2
* (for d20B).....	a20B11
* pin.....	a20B12
* screw (2).....	a20B5
* (for d20B).....	a20B6
TYPE CARRIER group, including R2x 21B1B, CLAMP X22B3, SROX Xc27B and SPRING Xc31B.....	X22B6
* 21B1B is assembled with a20B1, a20B2, a20B3, a20B4, a20B5, a20B6, a20B9, a20B10, a20B11, a20B12, 21B1B, X24B1B, Xc27B and Xc31B. Order by complete symbol X22B5	

<b>21B—Type-carrier Connecting Rod</b> .....	21B
forked eye.....	a21B1B
* lock nut (L.H.).....	21B2
* pin.....	21B3
* down.....	21B4
* (Cam Lever end).....	a21B5
* lock nut.....	21B6
* pin.....	21B7
* cotter.....	21B8
spring.....	a21B9
* adjustment.....	21B10
above.....	21B11

TYPE-CARRIER CONNECTING ROD group, X21B  
\* 21B1B is assembled with 21B5 and 21B4.

<b>22B—Type-carrier Extension</b> .....	a22B
look out.....	22B1
above.....	a22B2
spring.....	22B3
TYPE-CARRIER EXTENSION group.....	X22B

<b>23B—Type-carrier Shoes (long)</b> .....	a23B3B
screw (right and center) (2).....	23B1
* (left).....	23B2
on (front).....	a23B3
* (rear).....	a23B4
* rivet (lower).....	a23B5
* (right).....	a23B6
* (center, left) (2).....	23B7
TYPE-CARRIER SHOE group.....	X23B
* 23B3B is assembled with a23B3 to a23B7 inclusive.	

<b>24B—Type-carrier Shoes (short)</b> .....	b24B
screw (2).....	221
plate (trip for d20B).....	a24B2
TYPE-CARRIER SHOE group.....	X24B

<b>25B—Type-carrier-spring-abutment</b> .....	a25B
screw (front) (2).....	25B1
* (top).....	25B2
TYPE-CARRIER-SPRING-ABUTMENT STAND group.....	X25B

For Short Type Attachment see page 19.

<b>26B—Type Clamp</b> .....	a26B
extension.....	a26B1
spring.....	a26B2
TYPE CLAMP group.....	X26B

For Short Type Attachment see page 19.

<b>27B—Type-clamp Shoes</b> .....	a27B
screw (2).....	260
TYPE-CLAMP SHOE group.....	X27B

For Short Type Attachment see page 19.

<b>28B—Type-pusher</b> .....	a28B
screw.....	28B1
cover.....	a28B2
* screw (2).....	a28B3
TYPE-PUSHER GROUP group.....	X28B

For Short Type Attachment see page 19.

<b>29B—Type-pusher</b> .....	b29B
b29B1.....	b29B1
* rivet (head end) (2).....	29B2
* (eye end, long).....	29B3
* ( " " ).....	29B4
eye.....	a29B5
* pin.....	29B6
* cotter.....	29B7
TYPE-PUSHER group.....	X29B
* 29B1B is assembled with b29B1, 29B2, 29B3, 29B4 and a29B5.	

For Short Type Attachment see page 19.

<b>31B—Type Support Spring</b> .....	b31B
bar.....	a31B1B
* rivet (2).....	a31B2
* spring.....	a31B3
yoke.....	a31B4
extension.....	a31B7
TYPE-SUPPORT SPRING group.....	X31B
* 31B1B is assembled with b31B and a31B3.	

<b>32B—Pin-jaw-guida-rod Stand (right)</b> .....	32B1
nut.....	32B2
PIN-JAW-GUIDA-ROD group.....	X32B

31B to 32B inc.—(See page 17)

**Section C**

Mechanism for moving the Matrix Case forward and back, drawing the Mold Blade back for the proper size type body, and ejecting this type from the Mold.

<b>1C—Air Pin (14)</b> .....	1C
spring (14).....	1C1
AIR PIN group (14) each.....	X1C
NOTE: For use with machines on which the AIR PIN BLOCKS are worn we furnish:	
AIR PIN (A015) oversize.....	a1C2
<b>2C—Air Pin (fixed, stop for front row)</b> .....	a2C
spring.....	613
AIR PIN group.....	Xa2C
NOTE: For use with machines on which the AIR PIN BLOCKS are worn we furnish:	
AIR PIN (A015) oversize.....	a2C2

For 1517 machines see Extended Matrix  
Case Attachment 30CU page 21.

<b>3C—Air-pin Block (rear)</b> .....	b3C
dowel (No. 6 x 2-1/2").....	3C1
* (No. 6 x 2-1/2").....	3C2
* (No. 6 x 1-1/4").....	3C3
screw (5-16" x 1-5/8") (2).....	3C4
* (5-16" x 1-1/2") (2).....	3C5
* (5-16" x 9-8") (2).....	3C6
spring post.....	3C7
AIR-PIN BLOCK group.....	X3C

† The AIR-PIN BLOCK can be applied only  
in our factory.

For 1517 machines see Extended Matrix  
Case Attachment 30CU page 21.

<b>4C—Air-pin Plate</b> .....	a4C
dowel (2).....	4C1
screw (4).....	4C2
AIR-PIN PLATE group.....	X4C

<b>5C—Cross Slide</b> .....	a5C
draw rod.....	a5C1
* clamp screw.....	a5C2
extension.....	a5C3
* rivet (long).....	5C4
* (short).....	5C5
plate (stop for Matrix Case).....	5C6
* rivet (long) (2).....	727
* (short).....	721
Cross Slide group.....	X5C
* 5C4C is assembled with a5C2, a5C3, 5C4, a5C7, b5C9, a5C10 and a5C11.	

<b>6C—Cross-slide-extension Shoe</b> .....	a6C
screw (4).....	6C1
spring post.....	6C2
CROSS-SLIDE-EXTENSION SHOE group.....	Xa6C
* 6C2C is assembled with 6C2.	

<b>7C—Cross-slide Guide</b> .....	a7C
cover plate.....	7C1
screw (4).....	7C2
CROSS-SLIDE GUIDE group.....	Xa7C

For 1517 machines see Extended Matrix  
Case Attachment 30CU page 21.

<b>8C—Matrix Jaw (front)</b> .....	b8C
------------------------------------	-----

For 1517 machines see Extended Matrix  
Case Attachment 30CU page 21.

<b>9C—Matrix Jaw (rear)</b> .....	b9C
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For 1517 machines see Extended Matrix  
Case Attachment 30CU page 21.

<b>10C—Matrix-jaw Stop (front)</b> .....	b10C
rivet (3).....	724
MATRIX-JAW STOP group.....	Xb10C

<b>11C—Matrix-jaw Stop (rear)</b> .....	b11C
screw (2).....	219
MATRIX-JAW STOP group.....	Xb11C

For 1517 machines see Extended Matrix  
Case Attachment 30CU page 21.

<b>12C—Matrix-jaw Stop Rack (rear)</b> .....	a12C1
lock.....	a12C2
pin.....	a12C3
plug.....	a12C4
spring.....	a12C5
* abutment (rear).....	a12C6
* (front).....	a12C7
MATRIX-JAW STOP RACK group.....	Xa12C
* 12C1C is assembled with a12C2, a12C3, a12C4, a12C5, a12C6 and a12C7. Order by complete symbol Xa12C.	

<b>13C—Matrix-jaw-stop-rack Locking</b> Bar (rear).....	a13C
connecting rod.....	a13C1
* adjusting nut.....	a13C2
* lock nut.....	338
* washer.....	a13C7
spring.....	a13C8
* abutment pin.....	a13C9
stop washer.....	a13C10
YAWER-JAW-STOP-RACK LOCKING BAR group.....	Xa13C

<b>14C—Mold-blade Abutment Slides</b> .....	a14C
adjusting screw.....	a14C1
* lock spring.....	a14C10
* nut.....	a14C12
* spring.....	a14C13
* (for a14C10).....	a14C11
spring post.....	a14C8
MOLD-BLADE ABUTMENT SLIDE group.....	Xa14C
* 14C1C is assembled with a14C1, a14C2, a14C3 to a14C8 inclusive, a14C10 to a14C13 inclusive. Order by complete symbol Xa14C.	

<b>15C—Mold-blade-abutment-slide Spring</b> .....	15C
spring.....	612

<b>16C—Mold-blade Operating Rod</b> .....	a16C
distance sleeve (between 16C3 and 16C13).....	a16C1
ejecting spring (long).....	a16C2
* (short).....	a16C17
* abutment.....	a16C3
* sleeve.....	a16C4
lock.....	a16C5
* pin.....	a16C6
* spring.....	a16C7
* screw (2).....	a16C8
nut (rear).....	222
* lock nut.....	332
* (front).....	a16C15
sliding spring.....	613
* sleeve (left).....	a16C16
* (outside).....	a16C12
* abutment (front).....	a16C13
* (rear).....	a16C14

MOLD-BLADE OPERATING ROD group.....

† For Coreed Mold Attachment or Increased  
Pressure Attachment.

<b>17C—Mold-blade Operated Rod Ejecting Spring</b> .....	a17C
spring.....	613

For 1517 machines see Extended Matrix  
Case Attachment 30CU page 21.

<b>18C—Pin Jaw (front)</b> .....	a18C
stud (for X5C6).....	18C1
* nut.....	18C2
* washer.....	18C3
PIN JAW group.....	Xa18C
* 18C3C is assembled with 18C1.	

<b>19C—Pin Jaw (rear)</b> .....	19C
stud (for X5C6).....	19C1
* nut.....	19C2
* washer.....	19C3
PIN JAW group.....	X19C
* 19C3C is assembled with 19C1.	

<b>20C—Pin-jaw Guide Rod</b> .....	a20C
screw.....	a20C1
PIN-JAW GUIDE ROD group.....	X20C

<b>21C—Pin-jaw-guide-rod Stop</b> .....	a21C
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<b>22C—Pin-jaw-guide-rod Stand (front)</b> .....	a22C
nut.....	310
PIN-JAW-GUIDE-ROD STAND group.....	Xa22C

<b>23C—Pin-jaw-guide-rod Stand (rear)</b> .....	a23C
clamp screw.....	232
nut.....	310
PIN-JAW-GUIDE-ROD STAND group.....	Xa23C
* 23C1C is assembled with 23C1.	

<b>24C—Wedge Cover</b> .....	24C
screw.....	24C1
WEDGE COVER group.....	X24C

24C—(See page 15)

40C—(See page 21)



clamp screw.....	213.	2E1	14E-Centering-pin-cam Lever.....	a14E6	25E-Jaw-tongs Spring Box (continued)	a26E4
Belt SliPper Arm group.....	X2E	2E2	roller.....	14E8	ball socket plug.....	a26E5
		2E3	" pin.....	14E4	" " button.....	a26E6
		2E4	set screw.....	14E5	" plug (right bearing for Bell).....	a26E7
		2E5	Centering-pin-cam Lever.....	14E4E	" nut.....	a26E8
		2E6	*a14EE is assembled with 14E5 and 14E4E.		" washer.....	a26E9
		2E7	For use with machines on which the		spring (inside) (2).....	a26E10
		2E8	Cams are worn we furnish:		outside) (2).....	a26E11
		2E9	Centering-pin-cam Lever roller (a15" over-	a14E6	adjustment.....	a26E12
		2E10	seize).....		brake (wood) (2).....	a26E13
		2E11	Centering-pin-cam Lever roller (a30" over-	a14E7	" cone (2).....	a26E14
		2E12	seize).....		rod (lower).....	a26E15
		2E13			" nut.....	a26E16
		2E14			" lock nut.....	a26E17
		2E15			" (upper).....	a26E18
		2E16			lock nut (crushed end).....	a26E19
		2E17			" nut.....	a26E20
		2E18			" lock nut.....	a26E21
		2E19			" crushed.....	a26E22
		2E20			" ball plug.....	a26E23
		2E21			tube (2).....	a26E24
		2E22			" cap.....	a26E25
		2E23			" stud (2).....	a26E26
		2E24			" nut (2).....	a26E27
		2E25			" plate.....	a26E28
		2E26			JAW-TONGS SPRING BOX group includes	
		2E27			also BALL SOCKET a26E7 and BALL	
		2E28			SOCKET a26E8.....	a26E9
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		2E275				
		2E276				
		2E277				
		2E278				
		2E279				
		2E280				
		2E281				
		2E282				
		2E283				
		2E284				
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		2E291				
		2E292				
		2E293				
		2E294				
		2E295				
		2E296				
		2E297				
		2E298				
		2E299				
		2E300				



**61E—Pump-cam-lever Connecting Rod**  
eye (L.H.)..... 325.  
" look nut (L.H.)..... 325.  
" look nut..... 325.  
" pin (2)..... 325.  
" cotter (4)..... 325.  
**PUMP-CAM-LEVER CONNECTING ROD GROUP..... X46E**

**63E—Transfer wedge Cam** (driving, marked C in circle and C in square).  
(driven, marked C in square).  
Transfer-wedge Cam group..... X46E  
\*Cams can be furnished only in pairs.  
When a pair of Cams are to be replaced, the Shafts, complete with all their Cams, must be returned to our factory.

**70E—Transfer-wedge-cam Lever**  
clamp bolt..... 311.  
extension adjusting bolt..... 18.  
" look nut..... 314.  
roller..... 709E  
" pin..... 709E

**Transfer-wedge-cam Lever roller (015° overline)..... 709E**  
\*709E is assembled with 709E and 709E.  
(For use with machines on which the Cams are worn we furnish:  
Transfer-wedge-cam Lever roller (015° overline)..... 709E  
Transfer-wedge-cam Lever roller (030° overline)..... 709E

**71E—Type-carrier Cam** (driving, marked A in circle).  
(driven, marked A in square).  
Type-carrier Cam group..... X71E  
\*Cams can be furnished only in pairs.  
When a pair of Cams is to be replaced, the Shafts, complete with all their Cams, must be returned to our factory.

**72E—Type-carrier-cam Lever**  
clamp bolt..... 311.  
extension..... 18.  
" adjusting bolt..... 18.  
" look nut..... 314.  
roller..... 729E  
" pin..... 729E

**TYPE-CARRIER-CAM LEVER GROUP..... X72E**  
\*72E is assembled with 729E and 729E.  
(For use with machines on which the Cams are worn we furnish:  
Type-carrier-cam Lever roller (015° overline)..... 729E  
Type-carrier-cam Lever roller (030° overline)..... 729E  
For 14 and 18 point composition..... 729E  
Type-carrier-cam Lever extension..... 729E

**73E—Type-pusher Bell Crank**  
ball stud..... 841.  
Type-pusher Bell Crank group..... X73E  
\*73E is assembled with 73E and its occupation Cam 873E.  
Order by complete symbol X73E.

**74E—Type-pusher-bell-crank Fulcrum**  
Stud..... 74E  
nut..... 327.  
Type-pusher-bell-crank Fulcrum Stud group..... X74E

**75E—Type-pusher Cam** (driving, marked H in circle).  
(driven, marked H in circle).  
latch..... 759E  
" cotter..... 54.  
" spring..... 62.  
" pin..... 854.  
" washer..... 46.  
Type-pusher Cam group..... X75E  
\*75E is assembled with 75E and its occupation Cam 875E.

NOTE: Cams can be furnished only in pairs.  
When a pair of Cams is to be replaced, the Shafts, complete with all their Cams, must be returned to our factory.

**76E—Type-pusher-cam Lever**  
extension..... 76E  
roller..... 76E  
" pin..... 76E

**TYPE-PUSHER-CAM LEVER GROUP..... X76E**  
\*76E is assembled with 76E and 76E.  
(For use with machines on which the Cams are worn we furnish:  
Type-pusher cam Lever roller (015° overline)..... 76E  
Type-pusher cam Lever roller (030° overline)..... 76E

**77E—Type-pusher Connecting Rod**  
ball socket (long, Cam Lever end)..... 77E  
" (short, Cam Lever end)..... 77E  
" look nut..... 312.  
" look nut..... 312.  
spring (inside)..... 657.  
" (outside)..... 677E  
Type-pusher Connecting Rod group..... X77E

**78E—Type-pusher-connecting-rod Ball Socket** (Bell Crank end)..... 78E  
lock nut..... 78E  
Type-pusher-connecting-rod Ball Socket group..... X78E

**79E—Water Connection** (front)..... 79E  
screw (2)..... 240.  
Water Connection group..... X79E

**80E—Worm Shaft**..... 80E  
roller..... 80E  
gear..... 80E  
hand wheel..... 80E  
key (for Worm)..... 80E  
" (long, for 80E and 80E)..... 80E  
nut..... 329.  
Worm Shaft group..... X80E

\*80E, 80E and 80E can be applied outside our factory; for any other parts the complete Worm Shaft must be returned to our factory.

**81E—Jaw—Tong—spring—box Ball Socket** (upper)..... 81E  
lock nut..... 81E  
JAW-TONG-SPRING-BOX BALL SOCKET GROUP..... X81E

**86E—Locking-bar Cam** (marked I-3 in circle).  
NOTE: If one of these Cams is required the Shaft, complete with all their Cams, must be returned to our factory.

**87E—Mold-blade-carrier-latch Ball Crank**..... 87E  
" pin..... 87E  
stud..... 87E  
nut..... 87E  
MOLD-BLADE-CARRIER-LEVER BALL CRANK GROUP..... X87E  
\*87E is assembled with 87E.

**89E—Mold Clamp** (front)..... 89E

**96E—** (See page 15)

**97E to 112E inc.—** (See page 16)

**113E—Oil Guard**..... 113E

**114E—Oil Pan**..... 114E  
partition (center)..... 114E  
" (rear)..... 114E  
" (stud) (1-8" x 1-8" (6)..... 114E  
" (stud) (1-8" x 1-8" (4)..... 114E  
" pin..... 114E  
plate..... 114E  
" rivet..... 7230.  
Oil Pan group..... 114E  
\*114E is assembled with 114E to 114E inclusive. Order by complete symbol X114E.  
Machines prior to 7120 were not equipped with the following parts:  
Oil Pan Plate..... 114E  
" rivet..... 7230.  
114E

**115E—Oil-pan Shelf**..... 115E  
bracket (front)..... 115E  
" (rear)..... 115E  
handle..... 115E  
" rivet (4)..... 115E  
link (4)..... 115E  
" fulcrum pin (upper) (4)..... 115E  
" " (lower) (4)..... 115E  
" nut (4)..... 115E  
" washer (4)..... 115E  
stop pin (2)..... 115E  
Oil-pan Shelf group..... 115E  
\*115E is assembled with 115E to 115E inclusive and 115E.

**116E—Oil-pan-shelf-bracket Bolt** (5) (each)..... 116E

**117E to 133E inc.—** (See page 16 and 17)

**134E to 139E inc.—** (See page 17)

**140E—** (See page 15)

**141E to 145E inc.—** (See page 17)

**146E—** (See page 17)

**155E—Cam-shaft-stand Packing Piece** (2) (each)..... 155E

**275E—** (See page 19)

**276E—** (See page 17)

**280E to 282E inc.—** (See page 19)

**284E—Gate Vent Guard**..... 284E  
" block..... 284E  
" ball..... 284E  
" spring..... 284E  
" rivet (2)..... 284E  
Gate Vent Guard group..... 284E  
\*284E is assembled with 284E and 284E.  
\*284E is assembled with 284E and 284E.

## Section F

Mechanism for receiving type from the Type Carrier and assembling it in lines on the galley pan.

For Quindling and Centering Attachment see X109F group page 20.

**1F—Column Pusher**..... 1F  
line support stop and type guide..... 253.  
" screw..... 1F  
" sleeve (for Weight Cord)..... 1F  
spring post..... 1F  
stop pin (for 1F)..... 1F  
stud (for 1F)..... 1F  
" cotter..... 1F  
Column Pusher group..... X1F  
\*1F is assembled with 1F, 1F, 1F, 1F, 1F, 1F, 1F and 1F. Order by complete symbol X1F.

For 14 and 18 point composition see page 15.

**2F—Column-pusher Adjusting Screw** (for varying "point size")..... 2F  
disc..... 2F  
" pin..... 2F  
Column-pusher Adjusting Screw group..... X2F  
\*2F is assembled with 2F and 2F. Order by complete symbol X2F.

For 14 and 18 point composition see page 15.

**3F—Column-pusher-adjusting-screw Stand**..... 3F  
" spring..... 3F  
" stud..... 3F  
" nut (3)..... 3F  
Column-pusher-adjusting-screw Stand group..... X3F  
\*3F is assembled with 3F and 3F.

**4F—Column-pusher Fulcrum Screw** (long)..... 4F  
" (short)..... 4F  
lock nut (8)..... 4F  
Column-pusher Fulcrum Screw group..... X4F

**5F—Column-pusher Lever**..... 5F

**6F—Column-pusher-lever Stud**..... 6F  
nut..... 6F  
washer..... 6F  
Column-pusher-lever Stud group..... X6F

**7F—Column-pusher Spring**..... 7F  
plate (2)..... 7F  
Column-pusher Spring group..... X7F

**8F—Column-pusher Spring Box**..... 8F  
adjusting ball plug..... 8F  
" look nut..... 8F  
ball plunger..... 8F  
" washer..... 8F  
spring..... 8F  
Column-pusher Spring Box group..... X8F

## 9F—Column Support (short\*)

bar.....	9F1F	†
* finger catch.....	9F2	
* screw (2).....	252..	
slide.....	9F4	†
* plate.....	9F5	
* finger catch.....	9F6	
* rivet.....	775..	
* stop pin.....	772..	
* spring.....	639..	
* guide rod.....	9F10	

## COLUMN SUPPORT GROUP.....

\*For Columns 9 to 15 1-2 piece.

\*9F1F is assembled with 9F2 to 9F10 inclusive. Order by complete symbol X9F.

## 10F—Column Support (medium\*)

bar.....	10F1F	†
* finger catch.....	10F2	
* screw (2).....	252..	
slide.....	10F4	†
* plate.....	10F5	
* finger catch.....	10F6	
* rivet.....	775..	
* stop pin.....	772..	
* spring.....	640..	
* guide rod.....	10F10	

## COLUMN SUPPORT GROUP.....

\*For Columns 15 to 20 1-2 pieces.

\*10F1F is assembled with 10F2 to 10F10 inclusive. Order by complete symbol X10F.

## 11F—Column Support (long\*)

bar.....	11F1F	†
* finger catch.....	11F2	
* screw (2).....	252..	
slide.....	11F4	†
* plate.....	11F5	
* finger catch.....	11F6	
* rivet.....	775..	
* stop pin.....	772..	
* spring.....	641..	
* guide rod.....	11F10	

## COLUMN SUPPORT GROUP.....

\*For Columns 20 to 30 1-2 pieces.

\*11F1F is assembled with 11F2 to 11F10 inclusive. Order by complete symbol X11F.

## 12F—Column Support (extra long\*)

bar.....	12F1F	†
* finger catch.....	12F2	
* screw (2).....	252..	
slide.....	12F4	†
* plate.....	12F5	
* finger catch.....	12F6	
* rivet.....	775..	
* stop pin.....	772..	
* spring.....	639..	
* guide rod.....	12F10	

## COLUMN SUPPORT GROUP.....

\*For Columns 26 to 43 1-2 pieces.

\*12F1F is assembled with 12F2 to 12F10 inclusive. Order by complete symbol X12F.

## 13F—Galley Bar.....

pin.....	13F1F	†
* screw (2).....	13F2	

## GALLEY BAR GROUP.....

\*13F1F is assembled with 13F2. Order by complete symbol X13F.

## 14F—Galley Cam.....

driving pawl.....	14F1F	†
* pin (for 14F10).....	721..	
* fulcrum stud.....	14F3	
* washer (lower).....	47	
* nut.....	410	
* spring.....	640..	
* post (in 14F1F).....	840..	
* stop pin (in 14F1F).....	14F7	

## GALLEY CAM GROUP.....

\*14F1F is assembled with 14F3, 14F7, and 14F8.

\*14F1F is assembled with 14F2.

## 15F—Galley-cam Shaft.....

key (3).....	15F1	
retainer.....	15F2	
worm wheel.....	15F3	
* oil pin.....	15F4	

## GALLEY-CAM SHAFT GROUP.....

\*15F1F is assembled with 15F1.

## 16F—Galley-cam Stand.....

dowel.....	53..	
screw (4).....	29..	

## GALLEY-CAM STAND GROUP.....

\*16F1F is assembled with 16F1.

\*16F1F is assembled with 16F2.

\*16F1F is assembled with 16F3.

\*16F1F is assembled with 16F4.

\*16F1F is assembled with 16F5.

\*16F1F is assembled with 16F6.

\*16F1F is assembled with 16F7.

\*16F1F is assembled with 16F8.

\*16F1F is assembled with 16F9.

\*16F1F is assembled with 16F10.

\*16F1F is assembled with 16F11.

\*16F1F is assembled with 16F12.

\*16F1F is assembled with 16F13.

\*16F1F is assembled with 16F14.

\*16F1F is assembled with 16F15.

\*16F1F is assembled with 16F16.

\*16F1F is assembled with 16F17.

\*16F1F is assembled with 16F18.

\*16F1F is assembled with 16F19.

\*16F1F is assembled with 16F20.

\*16F1F is assembled with 16F21.

\*16F1F is assembled with 16F22.

\*16F1F is assembled with 16F23.

\*16F1F is assembled with 16F24.

\*16F1F is assembled with 16F25.

\*16F1F is assembled with 16F26.

\*16F1F is assembled with 16F27.

\*16F1F is assembled with 16F28.

\*16F1F is assembled with 16F29.

\*16F1F is assembled with 16F30.

\*16F1F is assembled with 16F31.

\*16F1F is assembled with 16F32.

\*16F1F is assembled with 16F33.

\*16F1F is assembled with 16F34.

\*16F1F is assembled with 16F35.

\*16F1F is assembled with 16F36.

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\*16F1F is assembled with 16F38.

\*16F1F is assembled with 16F39.

\*16F1F is assembled with 16F40.

\*16F1F is assembled with 16F41.

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\*16F1F is assembled with 16F43.

\*16F1F is assembled with 16F44.

\*16F1F is assembled with 16F45.

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\*16F1F is assembled with 16F51.

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\*16F1F is assembled with 16F53.

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\*16F1F is assembled with 16F198.

\*16F1F is assembled with 16F199.

\*16F1F is assembled with 16F200.

\*16F1F is assembled with 16F201.





For Quidding and Centering see page 20.

<b>13G—Paper-feed Pawl</b>	
(locking, upper).....	13G10 *
hub.....	13G2
operating link.....	13G3 *
operating link pin (also Spring Post).....	13G4
operating link bushing.....	13G5
(feeding, lower).....	13G6
connecting link (2).....	13G7 *
" rivet (2).....	13G8
spring post.....	13G9
PAPER-FEED PAWL GROUP.....	13G10
*13G10 is assembled with 13G2 to 13G9 inclusive.	

For Quidding and Centering see page 20.

<b>14G—Paper-feed-pawl Ring</b>	
pin (Stop for 13G10).....	14G0 *
friction spring (2).....	14G1
" screw (2).....	14G3
washer (2).....	14G4
PAPER-FEED-PAWL RING GROUP.....	14G0
*14G0 is assembled with 14G1.	

15G—Paper-feed-pawl Stud (over, in 14G1).....

15G.....	15G
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16G—Paper-feed-pawl Stud (upper, in 15G).....

nut.....	16G
PAPER-FEED-PAWL STUD GROUP.....	16G

17G—Paper-feed Spring Box connection (upper).....

look nut.....	e17G1
pin.....	e17G2
rod (2).....	e17G3
spring.....	e17G4
rod.....	e17G5
nut.....	e17G6
washer (2).....	e17G7
tube.....	e17G8
PAPER-FEED SPRING BOX GROUP.....	Xb17G

Machines prior to 1-20-44 were equipped with Paper-feed-spring box connection (upper).....

Paper-feed-spring box spring rod.....

The improved parts are interchangeable if the complete group is furnished.

18G—Paper Tension Bar (large, right).....

(small, left).....	18G
arm (left) (2).....	18G1
fulcrum pin.....	18G2
distance sleeve.....	18G3
guide plate.....	18G4
controlling link (2).....	18G5
fulcrum pin (in Housing).....	18G6
pin (to H1 18G).....	18G7
PAPER TENSION BAR GROUP.....	X18G

For Quidding and Centering see page 20.

19G—Paper-tower Lever.....

stud (for 4G).....	a19G1
nut.....	19G2
(for Xa17G and 54G5).....	a19G3
nut.....	19G4
PAPER-TOWER LEVER GROUP.....	Xa19G

20G—Pin Wheel (rear).....

(front).....	20G0 *
pin (34, in a20G1).....	20G2
shaft.....	a20G3 *
ratchet.....	20G4
Pin Wheel group.....	Xa20G
*a20G0 is assembled with a20G1, 20G2, a20G3 and 20G4. Order by complete symbol Xa20G.	

21G—Winding Spool

bushing (for Driving Pin).....	21G1Q *
spring (for locking paper).....	21G2
plug (rear).....	21G3
shaft.....	21G4
band.....	21G5G +
driving disc.....	21G6
pin.....	21G7
look nut.....	21G8
spring.....	21G9
abutment.....	21G10
tube.....	21G11
tube.....	21G12
tube.....	21G13
WINDING SPOOL GROUP.....	X21G

\*21G10 is assembled with 21G2, 21G3 and 21G13.

21G10 is assembled with 21G6.

21G11 is assembled with 21G8.

21G12 is assembled with 21G8.

21G13 is assembled with 21G8.

22G—Winding-spool Driving Shaft.....

nut.....	22G1
WINDING-SPOOL DRIVING SHAFT GROUP.....	22G2

23G—Winding-spool Driving Ratchet.....

pawl.....	23G
arm.....	23G1G *
operating finger.....	23G2
stop pin.....	23G3
pin.....	23G4
pin.....	23G5

WINDING-SPOOL DRIVING RATCHET GROUP.....

\*23G1G is assembled with 23G2, 23G4 and 23G5.

24G—Winding-spool Operating Spring.....

bushing.....	24G
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25G—Winding-spool-spring-box Plunger.....

button.....	25G1
eccentric.....	25G2
spring.....	25G3
spring.....	25G4
WINDING-SPOOL-SPRING-BOX PLUNGER GROUP.....	25G

27G to 25G inc.—(See page 20)

## Section H

Mechanism for melting metal and forcing it into the Mold, also the supply and drain pins to their connections with the parts they supply.

1H—Air Pipe.....

(brass, 100" x 1-2").....	1H
(100" x 1-2").....	a1H1
(from 1-8" x 1-8" (2).....	1H2
(1-8" x 2 1-4").....	1H3
(1-8" x 3 7-8").....	a1H4
(1-8" x 1-8").....	a1H5
(1-8" x 2-4").....	a1H6
elbow (1-8") (4).....	1H6
expansion elbow.....	1H7
nut.....	1H8
nut.....	1H9
tee (1-8").....	1H11
union (brass, 100") (2).....	1H12
(from 1-8").....	h1H14
Air Pipe group.....	Xa1H

2H—Air Cock (for air blast).....

(for air blast).....	a2H
Air Cock group.....	2H1

7H—Gas Cock.....

(1-4" x 1-4") (for gas supply).....	a7H
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5H—Gas Pipe.....

(iron, 1-4" x 1-3-4").....	5H
(1-4" x 3 3-4").....	a5H1
(1-4" x 1-8").....	b5H2
(1-4" x 1-3-4").....	a5H11
elbow (1-4") (4).....	5H5
nipple (1-4", galv. iron, for 4H1).....	5H7
union (1-4", iron).....	b5H8
Gas Pipe group.....	Xb5H

For Electric Melting Pot see page 21.

12H—Melting Pot (Gas).....

casing.....	a12H
bracket.....	a12H2H *
dowel (2).....	a12H18
screw (2).....	a12H20
screw (right).....	a12H19
stud (2).....	12H8
washer (2).....	a12H10
screw (4).....	a12H25
magnesium packing.....	a12H22
valve commut. ....	a12H24
MELTING POT GROUP.....	Xa12H

\*a12H2H is assembled with a12H, 12H8, a12H10, a12H11, a12H18, a12H19, a12H20, and a12H25. Order by the complete symbol Xa12H.

Machines 4636 to 4647 inclusive, and 4650 to 4659 inclusive (except 4753 to 4764 inclusive, for which see Xa12H) were equipped with the following parts:

MELTING POT (Gas).....	12H
casing.....	b12H1H *
(inside).....	12H2
plate (large).....	12H3H +
screw (8).....	12H4
screw (4).....	12H5
screw (3).....	12H6
screw (right).....	12H8
stud (2).....	a12H9

12H—Melting Pot (Gas).....

casing.....	12H
(inside).....	b12H1H *
plate (large).....	12H3H +
screw (8).....	12H4
screw (4).....	12H5
screw (3).....	12H6
screw (right).....	12H8
stud (2).....	a12H9

Machines 4636 to 4647 inclusive, and 4650 to 4659 inclusive (except 4753 to 4764 inclusive, for which see Xa12H) were equipped with the following parts:

MELTING POT (Gas).....	12H
casing.....	b12H1H *
(inside).....	12H2
plate (large).....	12H3H +
screw (8).....	12H4
screw (4).....	12H5
screw (3).....	12H6
screw (right).....	12H8
stud (2).....	a12H9

12H—Melting Pot (Gas) (continued).....

casing stud nut (2).....	310
washer (2).....	430
MELTING POT GROUP (with Magnesium Packing).....	Xb12H
*b12H1H is assembled with 12H, 12H2, 12H3H, 12H4, 12H5, 12H6, 12H8, a12H9, a12H10, a12H11. This assembly is obsolete and will no longer be furnished.	
Order instead the improved part Xa12H, which is interchangeable.	
12H3H is assembled with 12H5.	

13H—Melting-pot Chimney.....

For Machines equipped with Display Type Attachment or Load and Rule Mold Attachment see those Attachments.	
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14H—Nozzle (1-2").....

Nozzle, (vented).....	14H
vent tube.....	14H45
holder.....	14H46
Vented nozzles are not used with vented gate molds.	

15H—Nozzle Squaring Pin.....

(for 1-2" Nozzle).....	15H
(for 5-8" Nozzle).....	15H1

16H—Pin Bracket.....

plug.....	b16H1H *
screw (large) (2).....	a16H5
(small).....	a16H11
screw.....	a16H4
PIN BRACKET GROUP.....	Xa16H
*b16H1H is assembled with a16H5.	

(For machines equipped with Display Type Attachment, see page 15)

17H—Piston.....

handle.....	17H
stem.....	17H1H *
nut.....	17H2
nut.....	17H3
nut.....	17H4
nut.....	17H5
nut.....	17H6
nut.....	17H7
nut.....	17H8
nut.....	17H9
nut.....	17H10
nut.....	17H11
nut.....	17H12
nut.....	17H13
nut.....	17H14
nut.....	17H15
nut.....	17H16
nut.....	17H17
nut.....	17H18
nut.....	17H19
nut.....	17H20
nut.....	17H21
nut.....	17H22
nut.....	17H23
nut.....	17H24
nut.....	17H25
nut.....	17H26
nut.....	17H27
nut.....	17H28
nut.....	17H29
nut.....	17H30
nut.....	17H31
nut.....	17H32
nut.....	17H33
nut.....	17H34
nut.....	17H35
nut.....	17H36
nut.....	17H37
nut.....	17H38
nut.....	17H39
nut.....	17H40
nut.....	17H41
nut.....	17H42
nut.....	17H43
nut.....	17H44
nut.....	17H45
nut.....	17H46
nut.....	17H47
nut.....	17H48
nut.....	17H49
nut.....	17H50
nut.....	17H51
nut.....	17H52
nut.....	17H53
nut.....	17H54
nut.....	17H55
nut.....	17H56
nut.....	17H57
nut.....	17H58
nut.....	17H59
nut.....	17H60
nut.....	17H61
nut.....	17H62
nut.....	17H63
nut.....	17H64
nut.....	17H65
nut.....	17H66
nut.....	17H67
nut.....	17H68
nut.....	17H69
nut.....	17H70
nut.....	17H71
nut.....	17H72
nut.....	17H73
nut.....	17H74
nut.....	17H75
nut.....	17H76
nut.....	17H77
nut.....	17H78
nut.....	17H79
nut.....	17H80
nut.....	17H81
nut.....	17H82
nut.....	17H83
nut.....	17H84
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nut.....	17H86
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nut.....	17H96
nut.....	17H97
nut.....	17H98
nut.....	17H99
nut.....	17H100
nut.....	17H101
nut.....	17H102
nut.....	17H103
nut.....	17H104
nut.....	17H105
nut.....	17H106
nut.....	17H107
nut.....	17H108
nut.....	17H109
nut.....	17H110
nut.....	17H111
nut.....	17H112
nut.....	17H113
nut.....	17H114
nut.....	17H115
nut.....	17H116
nut.....	17H117
nut.....	17H118
nut.....	17H119
nut.....	17H120
nut.....	17H121
nut.....	17H122
nut.....	17H123
nut.....	17H124
nut.....	17H125
nut.....	17H126
nut.....	17H127
nut.....	17H128
nut.....	17H129
nut.....	17H130
nut.....	17H131
nut.....	17H132
nut.....	17H133
nut.....	17H134
nut.....	17H135
nut.....	17H136
nut.....	17H137
nut.....	17H138
nut.....	17H139
nut.....	17H140
nut.....	17H141
nut.....	17H142
nut.....	17H143
nut.....	17H144
nut.....	17H145
nut.....	17H146
nut.....	17H147
nut.....	17H148





**NOTE:** When the Speed Regulating Attachment is applied to a machine already equipped with the Cam Oiling Device, order the following additional parts:  
Screw (short, to 115E2 and 115E3) (6) .27 130E2

<b>131E—Speed-Bracket Sliding Shaft</b> .....	<b>131E11</b>
gear (large, middle).....	131E22
“ (medium, rear).....	131E31
key (3).....	131E44
nut.....	131E53
pin (small, front).....	131E64
rack.....	131E77
washer.....	131E85
<b>Speed-Bracket Sliding Shaft group</b> .....	<b>X131E</b>
*Parts should be replaced in our factory.	

<b>132E—Speed Index Plate</b> .....	<b>132E11</b>
bracket.....	132E22
“ pin (2).....	132E31
screw (6).....	132E44
<b>Speed Index Plate group</b> .....	<b>X132E</b>
*ORDER is assembled with 132E3.	

<b>133E—Turnbuckle</b> .....	<b>133E11</b>
idler.....	133E21
“ shaft.....	133E31
latch.....	133E44
“ fulcrum pin.....	133E53
“ roller (2).....	133E64
“ spring.....	133E77
“ stop pin.....	133E85
oil pipe (front).....	133E94
“ (rear).....	133E103
“ clamp.....	133E111
“ screw.....	133E121
pinion.....	133E131
“ shaft (also fulcrum pin).....	133E141
<b>Turnbuckle group</b> .....	<b>X133E</b>
*133E1E is assembled with 133E9 to 133E12 inclusive.	
*133E1E is assembled with 133E3.	
*Parts should be replaced in our factory.	

<b>134E—Operating-Lever Spring Box</b> .....	<b>134E11</b>
cam.....	134E21
dowel (stop for 37F1).....	134E31
plunger.....	134E44
<b>Operating-Lever Spring Box group</b> .....	<b>X134E</b>
*37F1E is assembled with 37F1, 37F2, 37F3E and 37F7E. Order by complete symbol X37F.	

## (ATTACHMENT 22CU)

## Attachment for English Display Matrices

OBJECT: To adapt the Composing Machine to use English Display Matrices.

NOTE: When this Attachment is applied the Display Type Attachment must be applied at the same time if it is not already on the machine.

<b>135E—Centering Pin</b> .....	<b>135E11</b>
key.....	135E21
nut.....	135E31
<b>Centering Pin group</b> .....	<b>X135E</b>

\*20A1E is assembled with 20A3.

NOTE: In addition to furnishing the above part the BARNES also must be altered by enlarging the holes for the BOWE 6A5, spring. The CENTERING PIN SPRING also must be redrilled on its diameter which extends down through the BARNES, and the BARNES FRAME 6A must be altered to receive the spring clip on the ENGLISH DISPLAY MATRIX HOLDER. The BARNES should be returned to our Factory for these alterations.

<b>Matrix Holder (for English Display Matrices)</b> .....	<b>X142E</b>
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## (ATTACHMENT 11CU)

## Lead and Rule Attachment

OBJECT: To operate Continuous Strip Molds. When this attachment is applied the Display Type Attachment must be applied if not already on the machine. The Automatic Cutter should also be applied at the same time.

NOTE: Machines prior to 3455 require in addition to the parts listed on the 3-Burner Gas Burner for which see X345E.

<b>51E—Mold-blade Micrometer Wedge</b> .....	<b>51E1</b>
adjusting screw.....	51E2
“ spring.....	51E3
“ nut.....	51E4
rod.....	51E5
“ nut.....	51E6
“ lock nut.....	51E7
“ spring.....	51E8
spring.....	51E9
<b>Mold-blade Micrometer Wedge group</b> .....	<b>X51E</b>

<b>52E—Mold-blade micrometer-wedge stand Screw (2)</b> .....	<b>52E1</b>
.....	222

<b>53E—Mold-blade Operating Bar</b> .....	<b>53E1</b>
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<b>15E—Centering-pin-cam-lever Shaft</b> .....	<b>15E1</b>
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<b>134E—Centering-pin-lever Bracket</b> .....	<b>134E1E</b>
clamp (2).....	134E21E
pin (2).....	134E31E
“ thumb screw (2).....	134E41E
<b>CENTERING-PIN-LEVER BRACKET group</b> .....	<b>X134E</b>
*134E1E is assembled with 134E13, 134E14 and 134E15. Order by complete symbol X134E.	

<b>135E—Clamping - screw Connecting Rod</b> .....	<b>135E1</b>
axle.....	135E21
“ lock nut.....	135E31
“ pin.....	135E41
“ spring.....	135E51
nut.....	135E61
“ lock nut.....	135E71
washer (2).....	135E81
spring.....	135E91
“ adjusting nut.....	135E101
“ lock nut.....	135E111
<b>CLAMPING - SCREW CONNECTING ROD GROUP</b> .....	<b>X135E</b>
*135E11E is assembled with 135E12.	

<b>136E—Auxiliary Bracket</b> .....	<b>136E1E</b>
adjusting screw.....	136E2E
clamp bolt.....	136E3E
“ nut (2).....	136E4E
<b>AUXILIARY BRACKET GROUP</b> .....	<b>X136E</b>
*136E1E is assembled with 136E5E.	

<b>137E—Guard (on 136E1)</b> .....	<b>137E1</b>
screw (2).....	137E2
<b>Guard group</b> .....	<b>X137E</b>

<b>138E—Operating-bar Lever (2)</b> .....	<b>138E1E</b>
bushing.....	138E2E
“ pin.....	138E3E
“ nut.....	138E4E
“ spring.....	138E5E
“ stop.....	138E6E
“ washer.....	138E7E
<b>Operating-Bar Lever group</b> .....	<b>X138E</b>
*138E1E is assembled with 138E2 to 138E7 inclusive. Order by complete symbol X138E.	

<b>139E—Operating - bar - lever Fulcrum Pin</b> .....	<b>139E1</b>
nut.....	139E2
<b>Operating-Bar-Lever Fulcrum Pin group</b> .....	<b>X139E</b>

<b>141E—Spring Box</b> .....	<b>141E1</b>
cap (2).....	141E2
olive.....	141E3
spring.....	141E4
“ adjustment (2).....	141E5
rod.....	141E6
“ adjusting nut (2).....	141E7
“ lock nut.....	141E8
“ lock nut.....	141E9
“ nut.....	141E10
<b>Spring Box group</b> .....	<b>X141E</b>

<b>142E—Spring-box Lever (2) (each)</b> .....	<b>142E1</b>
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<b>143E—Spring-box-lever Fulcrum Pin</b> .....	<b>143E1</b>
nut (2).....	143E2
<b>Spring-box-lever Fulcrum Pin group</b> .....	<b>X143E</b>

<b>144E—Spring-box-lever Link</b> .....	<b>144E1</b>
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<b>145E—Spring-box-lever-link Pin</b> .....	<b>145E1</b>
nut.....	145E2
<b>Spring-box-lever-link Pin group</b> .....	<b>X145E</b>

<b>146E—Melting-pot-chimney Extension</b> .....	<b>146E1</b>
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<b>147E—Nozzle (for continuous strip Molds)</b> .....	<b>147E1</b>
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<b>17H—Piston</b> .....	<b>17H1</b>
handle.....	17H2
“ nut.....	17H3
“ pin.....	17H4
<b>Piston group</b> .....	<b>X17H</b>
*17H1H is assembled with 17H2 and 17H3.	
For use with worn Pump Rods use furnish:	
<b>Piston (003° oversize)</b> .....	<b>17H4</b>

<b>17H—Piston (continued)</b>	
handle.....	17H1H
“ nut.....	17H2
“ pin.....	17H3
<b>Piston (003° oversize) group</b> .....	<b>X17H4</b>
*17H1H is assembled with 17H2 and 17H3.	

<b>23H—Pump Body</b> .....	<b>23H1H</b>
bearing (nozzle end).....	23H1
guide.....	23H2
“ screw (2).....	23H3
plug (bottom).....	23H4
regulating screw.....	23H5
valve.....	23H6
<b>Pump Body group</b> .....	<b>X23H1</b>
*23H1H is assembled with 23H1 to 23H6 inclusive. Order by complete symbol X23H1.	

(ATTACHMENT 12CU)  
Automatic Cutter  
(Rule Cutting Device)

OBJECT: To automatically cut the product of the continuous strip Molds to any length desired, from six feet twenty-five inches. To use this attachment requires that the machine be equipped with the Lead and Rule Mold Operating Attachment which in turn requires the Display Type Attachment.

<b>146E—Shear Cam (marked R)</b> .....	<b>146E1</b>
screw (3).....	146E2
“ nut (3).....	146E3
<b>SHEAR CAM group</b> .....	<b>X146E</b>

<b>276E—Guard</b> .....	<b>276E1E</b>
bracket.....	276E2
“ screw (2).....	276E3
<b>Guard group</b> .....	<b>X276E</b>
*276E1E is assembled with 276E2.	

NOTE: Automatic Cutters shipped prior to February, 1928, were not equipped with any parts of group X276E. These parts provide a guard in front of the INTERLOCKING-LEVER OPERATING ROD 140E1.

<b>4F—Comman-pusher Fulcrum Screw</b> .....	<b>4F3</b>
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<b>17F—Galley-pin Shelf</b> .....	<b>17F1</b>
spring pin (for 114F1).....	17F2
<b>Shelf group</b> .....	<b>X17F</b>

<b>17F—Box (for short leads)</b> .....	<b>17F1</b>
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<b>17F—Channel Bar (for leads and rules)</b> .....	<b>17F1</b>
screw (2).....	17F2
support (for long strips).....	17F3
“ screw.....	17F4
<b>CHANNEL BAR group</b> .....	<b>X17F</b>

Earlier Automatic Cutters were equipped with the following parts:

<b>CHANNEL BAR</b> .....	<b>77F1</b>
screw (2).....	77F2
and omitted 17F3 and 17F4.	77F3

NOTE: The improved parts are to keep long strips of lead or rule from bending as they are being delivered from the blade. To apply these parts requires that the SUPPORT 17F3 and SCREWS 17F4 be furnished and the CHANNEL BAR 17F1 altered to suit. After this alteration the CHANNEL BAR becomes 17F1.

<b>78F—Galley</b> .....	<b>78F1</b>
support bar (2).....	78F2
“ rivet (5).....	78F3
<b>GALLEY group</b> .....	<b>X78F</b>
*78F1F is assembled with 78F2 and 78F3. Order by complete symbol X78F.	

<b>79F—Guide Plate</b> .....	<b>79F1</b>
(front).....	79F2
(rear).....	79F3
“ rivet (4).....	79F4
separator (4).....	79F5
<b>GUIDE PLATE group</b> .....	<b>X79F</b>
*79F1F is assembled with 79F2, 79F3 and 79F4. Order by complete symbol X79F.	

<b>80F—Guide Roller (for long strips)</b> .....	<b>80F1</b>
eccentric shaft.....	80F2
“ nut.....	80F3
“ roller.....	80F4
<b>GUIDE ROLLER group</b> .....	<b>X80F</b>

<b>51F—Main Bracket</b> ..... <b>831F</b> * spring stop (for 120F1)..... <b>831</b> ..... " (for 127F1)..... <b>856</b> ..... fulcrum-pin (for 108F1)..... <b>814</b> ..... " cotter (2)..... <b>815</b> ..... " washer..... <b>817</b> ..... Main Bracket group..... <b>X81F</b> *815F1 is assembled with 81F3, 81F4 and 81F5.	<b>51F1F</b> * 81F3 81F4 81F5 81F6 81F7 <b>X81F</b>	<b>51F—Transfer Bar (front)</b> ..... <b>97F1</b> hanger (left)..... <b>97F4F</b> * " spring pin..... <b>964</b> ..... " (right)..... <b>97F5</b> " screw (4)..... <b>967</b> Transfer Bar group..... <b>X97F</b> *97F4F is assembled with 97F5.	<b>51F1F</b> * 97F4F 97F5 97F6 97F7 <b>X97F</b>	<b>116F—Shear Trip Lever</b> ..... <b>116F1F</b> * spring pin..... <b>854</b> ..... <b>116F2</b> Shear Trip Lever group..... <b>X116F</b> *116F1F is assembled with 116F2. Order by complete symbol X116F.	<b>116F1F</b> * 854 <b>X116F</b>	<b>117F—Shear-Trip-Lever Spring</b> ..... <b>107F1</b> plate (2)..... <b>107F2</b> Shear-Trip-Lever Spring group..... <b>X117F</b>	<b>117F1</b> 107F1 107F2 <b>X117F</b>	<b>118F—Shear-Trip-Lever Spring Bar</b> ..... <b>118F1F</b> * pin..... <b>854</b> ..... <b>118F2</b> " (stop for 91F1)..... <b>854</b> ..... <b>118F3</b> Shear-Trip-Lever Spring Bar group..... <b>X118F</b> *118F1F is assembled with 118F2.	<b>118F1F</b> * 854 854 <b>X118F</b>	<b>119F—Shear Yoke</b> ..... <b>119F1F</b> * fulcrum pin..... <b>119F2</b> " cotter (2)..... <b>119F3</b> spring pin..... <b>853</b> ..... <b>119F4</b> Shear Yoke group..... <b>X119F</b> *119F1F is assembled with 119F4.	<b>119F1F</b> * 119F2 119F3 853 <b>X119F</b>	<b>120F—Shear-Yoke Spring</b> ..... <b>120F1</b> plate (2)..... <b>120F2</b> Shear-Yoke Spring group..... <b>X120F</b>	<b>120F1</b> 120F2 <b>X120F</b>	<b>121F—Stacker-rock-shaft Connecting Rod</b> ..... <b>121F1</b> eye (lower)..... <b>121F2</b> " (upper)..... <b>121F3</b> " pin..... <b>121F4</b> " cotter (2)..... <b>85</b> ..... <b>121F5</b> nut (2)..... <b>35</b> ..... <b>121F6</b> Stacker-Rock-Shaft Connecting Rod group..... <b>X121F</b>	<b>121F1</b> 121F2 121F3 121F4 85 35 <b>X121F</b>	<b>122F—Thrust Bar</b> ..... <b>122F1</b> fulcrum pin..... <b>122F2</b> nut (2)..... <b>122F3</b> Thrust Bar group..... <b>X122F</b>	<b>122F1</b> 122F2 122F3 <b>X122F</b>	<b>123F—Thrust-bar Bell Crank</b> ..... <b>123F1F</b> * pin..... <b>853</b> ..... <b>123F2</b> " cotter..... <b>97</b> ..... <b>123F3</b> spring pin..... <b>853</b> ..... <b>123F4</b> Thrust-bar Bell Crank group..... <b>X123F</b> *123F1F is assembled with 123F2 and 123F4. Order by complete symbol X123F.	<b>123F1F</b> * 853 97 853 <b>X123F</b>	<b>124F—Thrust-bar-bell-crank Fulcrum Pin</b> ..... <b>124F1</b> nut..... <b>35</b> ..... <b>124F2</b> Thrust-bar-bell-crank Fulcrum Pin group..... <b>X124F</b>	<b>124F1</b> 35 <b>X124F</b>	<b>125F—Thrust-bar-bell-crank Operating Bar</b> ..... <b>125F1</b>	<b>125F1</b>	<b>126F—Thrust-bar-bell-crank Spring</b> ..... <b>126F1</b> plate (2)..... <b>126F2</b> Thrust-bar-bell-crank Spring group..... <b>X126F</b>	<b>126F1</b> 126F2 <b>X126F</b>	<b>127F—Thrust-bar-bell-crank Spring</b> ..... <b>127F1</b> plate (2)..... <b>127F2</b> Thrust-bar-bell-crank Spring group..... <b>X127F</b>	<b>127F1</b> 127F2 <b>X127F</b>	<b>128F—Thrust Bar Latch (left)</b> ..... <b>128F1F</b> * spring pin..... <b>854</b> ..... <b>128F2</b> " (right)..... <b>128F3</b> spring pin..... <b>854</b> ..... <b>128F4</b> fulcrum pin..... <b>853</b> ..... <b>128F5</b> " nut..... <b>35</b> ..... <b>128F6</b> spring..... <b>632</b> ..... <b>128F7</b> Thrust Bar Latch group..... <b>X128F</b> *128F1F is assembled with 128F2. *128F3F is assembled with 128F4.	<b>128F1F</b> * 854 128F3 854 853 35 632 <b>X128F</b>	<b>129F—Thrust-bar Operating Rod</b> ..... <b>129F1</b> eye..... <b>129F2</b> " lock nut..... <b>35</b> ..... <b>129F3</b> " pin..... <b>860</b> ..... <b>129F4</b> " cotter..... <b>35</b> ..... <b>129F5</b> Thrust-bar Operating Rod group..... <b>X129F</b>	<b>129F1</b> 129F2 35 860 35 <b>X129F</b>	<b>175F—Friction Plate</b> ..... <b>175F1</b> screw..... <b>175F2</b> " washer..... <b>446</b> ..... <b>175F3</b> Friction Plate group..... <b>X175F</b>	<b>175F1</b> 175F2 446 <b>X175F</b>	<b>176F—Stacker Guard</b> ..... <b>176F1</b> Automatic Cutters shipped prior to early 1924, were not equipped with Stacker Guard 176F1. This part operates to prevent overthrow of the Transfer Bars when stacking material.	<b>176F1</b>
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Automatic Cutters shipped prior to March, 1924, were not equipped with: TRANSFER BAR (rear)..... 90F1

## (ATTACHMENT 18CU)

## Short Type Attachment

ORDER: To provide for the casting and delivery of short type from Style FC and Style FD (short type) Models.

NOTE: In addition to furnishing the following new parts the following alteration must be made on Machines prior to 1943: The Normal-wide-looking-pin Stand must have clearance cut in it to clear the Type Pusher.

<b>20B-Type Carrier</b> .....	a20B15B *
bushing.....	a45B
jaw.....	a20B16
* rivet (2).....	714B
lever (for a31B4).....	710A
* pin.....	b20B4
* cotter.....	a5B
* stand.....	a20B17
* rivet (2).....	710A
* (for a20B4).....	a20B11
* pin.....	a20B12
shield.....	a20B13
* screw (2).....	209B
stop (for Type Support).....	a20B18
* rivet.....	a20B19

TYPE CARRIER group, including Row Xa21B, EXTENSION Xa22B, CLAMP Xa23B, SHOE b20B5, SADDLE Xa24B, SPOK Xa27B4, and SPRING Xa28B5

\*a20B15B is assembled with a20B11, a20B12, a20B13, a20B4, a20B5, 209B, a20B8, a20B10, a20B11, a20B12, a20B16, a20B17, a20B18, Xa21B, Xa23B, Xa26B4, Xa27B4, and Xa28B5. Order by complete symbol Xa20B15.

<b>21B-Type Carrier Connecting Rod</b> .....	21B
forced eye (carrier end).....	21B1B
* lock nut (L. H.).....	317
* pin.....	21B2
* dowel.....	21B3
* (exam lever end).....	21B5
* lock nut.....	316
* pin.....	21B6
* cotter.....	21B8
spring.....	615
* abutment.....	21B10
screw.....	21B11
T-BUSHING CENTERING ROD group.....	Xa21B

\*21B1B is assembled with 21B3 and 21B4

<b>22B-Type Carrier Extension</b> .....	a22B
lock nut.....	22B1
screw.....	a22B2
spring.....	616
TYPE-CARRIER EXTENSION group.....	Xa22B

<b>23B-Type Carrier Shoe (long)</b> .....	a23B3B
cam (front).....	a23B3
* (rear).....	a23B4
* rivet (lower).....	720B
* (right).....	721
* (center, left) (2).....	7207
a23B3B is assembled with a23B3 to a23B7, inclusive.	

<b>24B-Type Carrier Shoe (short)</b> .....	b24B
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<b>25B-Type Clamp</b> .....	b20B4
extension.....	b20B1
spring.....	6221
TYPE CLAMP group.....	Xa25B4

<b>27B-Type Clamp Shoe</b> .....	a27B4
screw (3).....	a27B1
TYPE CLAMP SHOE group.....	Xa27B4

<b>28B-Type Pusher Guide</b> .....	a28B4
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<b>29B-Type Pusher</b> .....	a29B3B *
blade.....	b29B1
* rivet (end end) (2).....	732B
* (eye end, long).....	730B
* (eye end, short).....	732
a29B3B is assembled with b29B1, 209B, 209X, 20B4, and a29B5.	

<b>31B-Type Support Spring</b> .....	b31B8
bar.....	b31B1B
* rivet (2).....	a31B2
* yoke.....	a31B3
spring.....	a31B6
extension.....	a31B7
TYPE SUPPORT SPRING group.....	Xa31B8

\*a31B1B is assembled with a31B2 and b31B3

<b>21D-Short Type Normal Wedge</b> .....	Xa21D7
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<b>15F-Link Hook</b> .....	a15F0F *
sewer.....	197B
rivet (2).....	716A
bushing.....	197F
LINK HOOK group.....	Xa15F6
*a15F0F is assembled with 197B, 197F and a197F. Order by complete symbol Xa15F6.	

<b>51F-Type Channel Block</b> .....	b51F30F *
int.....	a51F1
* screw (2).....	a51F32
pin.....	a51F33
type guide plate (right).....	a51F34
* screw (6).....	222B
* (left).....	a51F35
* screw (5).....	222B
adjusting screw.....	a51F37
*a51F30F is assembled with a51F31 to a51F38 inclusive.	

## (ATTACHMENT 20CU)

## Cored Mold Operating Attachment

ORDER: To provide for the use of Style 3U Cored Mold. This attachment is used for the 30- and 36-point 1U (cored) Model. The 4U Mold which is used for casting 24-point cored product does not require this attachment, but operates with the same standard equipment as the earlier 1U and 2U Models.

<b>1A-Bridge-lever-link Pin</b> .....	a3A2A *
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spring.....	a3A1
BRIDGE-LEVER-LINK PIN group.....	Xa3A2
*a3A2A is assembled with a3A1. Order by complete symbol Xa3A2.	

<b>67A-Centering-pin-lifting-link Gag</b> .....	67A1
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Block (2).....	67A2
clip (2).....	
CENTERING-PIN-LIFTING-LINK GAG BLOCK group (2).....	Xa7A

<b>15C-Mold-blade Operating Rod</b> .....	a15C21
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coring spring.....	6181
* sleeve.....	b10C4

<b>275E-Centering-pin Loading Lever</b> .....	275B7
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spring.....	665
* plunger.....	275B8
* adjusting screw.....	121
* stem.....	275B9
* rod.....	275B4
* nut.....	314
* lock nut.....	315
CENTERING-PIN LOADING LEVER group.....	Xa275E7

<b>14H-Nozzle</b> .....	a14H2
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<b>17H-Piston (for Display Type)</b> .....	a17H15
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handle.....	17H1H
* stem.....	17H2
* nut.....	314
PISTON group.....	Xa17H5
*a17H1H is assembled with 17H2 and 17H3.	

<b>20H-Piston Spring</b> .....	615B
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<b>23H-Pump Body</b> .....	20H
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bearing (couple end, for a20H1).....	a23H1B
guide (and stop, for a17H15).....	23H2
* screw (2).....	220
plug (bottom).....	23H3
regulating screw (for flow of metal).....	23H4
valve.....	23H5
PUMP BODY group.....	Xa23H1B
*a23H1B is assembled with 23H1, 23H2, 23H3, 23H4, 23H5 and 20H. Order by complete symbol Xa23H1B.	

<b>28E-Air Pipe Connection Block</b> .....	a28E1
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connector (for pipe) (7).....	28E2
screw (to main stand) (2).....	220
AIR PIPE CONNECTION BLOCK group.....	Xa28E1

<b>28E-Valve Box Body (for control valve)</b> .....	a28E1E *
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30 and 36 point display type	
Increased Pressure Attachment consists of the following:	
3A—Bridge-lever-link Pin	s3A1
spring	s3A2
HAND-LEVER-LINK PIN group	Xs3A1
*3A2A is assembled with s3A1. Order by complete symbol Xs3A2.	
67A—Centring-pin-lifting-link Gag	
Block (2)	67A
clip (2)	67A
CENTRING-PIN-LIFTING-LINK GAG BLOCK	
STUD (2)	X67A

**212E—Valve Box Body (for control valve) (continued)**

valve (out-off) (lower).....	282F14
" (upper).....	282F16
" pin.....	282K10
" spring.....	282L17
VALVE BOX GROUP.....	X212E

\*282E12 is assembled with 282F2 to 282F7 inclusive. Order by complete symbol X212E.

<b>150F—Column Pusher</b> .....	190F1F
line support stop.....	190F2
" screw.....	233
release pin (for line support pusher catch).....	190F4
shave (for clain).....	190F5
spring post.....	190F6
stop pin (for line support pusher).....	190F7
stud (for shave).....	190F8
" roller.....	85
GOVERN PRESSURE GROUP.....	X150F

\*190F1F is assembled with 190F2 to 190F9 inclusive. Order by complete symbol X150F.

<b>150F—Line Hook (lower)</b> .....	190F1
" (upper).....	190F2F
knob.....	190F3
lower.....	190F4
" rivet (2).....	7152
" spring.....	190F5
" screw.....	190F6
LINE HOOK GROUP.....	X150F

\*190F2F is assembled with 190F1 to 190F6 inclusive. Order by complete symbol X150F.

<b>151F—Line-Hook Stud</b> .....	190F1
nut.....	190F2
LINE HOOK STUD GROUP.....	X151F

<b>152F—Line-support (thin) (5 to 8 pt.) (9 to 24 pt.)</b> .....	192F1F
guide.....	192F2
" rivet (2).....	192F3
" spring.....	192F4
" screw.....	254
LINE-SUPPORT GROUP.....	X152F

\*192F1F is assembled with 192F2 to 192F5 inclusive. Order by complete symbol X152F.

<b>153F—Line-support (thin) (5 to 8 pt.) (28 to 60 pt.)</b> .....	193F1F
guide.....	193F2
" rivet (2).....	7152
" spring.....	193F3
" screw.....	254
LINE-SUPPORT GROUP.....	X153F

\*193F1F is assembled with 193F2 to 193F5 inclusive. Order by complete symbol X153F.

<b>154F—Line-support (thick) (9 to 12 pt.) (9 to 24 pt.)</b> .....	194F1F
guide.....	194F2F
" rivet (2).....	7152
" spring.....	194F3
" screw.....	254
LINE-SUPPORT GROUP.....	X154F

\*194F1F is assembled with 194F2F, 194F4, to 194F7 inclusive. Order by complete symbol X154F.

<b>155F—Line-support (thick) (9 to 12 pt.) (23 to 60 pt.)</b> .....	195F1F
guide.....	195F2
" rivet (2).....	7152
" spring.....	195F3
" screw.....	254
LINE-SUPPORT GROUP.....	X155F

\*195F1F is assembled with 195F2 to 195F5 inclusive. Order by complete symbol X155F.

<b>156F—Line-support Pusher</b> .....	196F1F
guide.....	196F2
" rivet.....	7152
LINE-SUPPORT PUSHER GROUP.....	X156F

\*196F1F is assembled with 196F2 to 196F5. Order by complete symbol X156F.

<b>212F—Line-support Chain</b> .....	212F1F
outlet.....	212F2
LINE-SUPPORT CHAIN GROUP.....	X212F

<b>217F—Line-support-pusher Catch</b> .....	217F1
screw.....	217F2
slide.....	217F3
" spring.....	217F4
" screw (2).....	2251
" spring.....	6293
LINE-SUPPORT-PUSHER CATCH GROUP.....	X217F

<b>218F—Trip (repeater)</b> .....	218F1
carriage.....	218F2F
" clamp screw.....	218F3
" nut.....	218F4
" gap.....	218F5
" clamp screw.....	218F9
" nut.....	218F10
pin.....	7224
spring.....	246
post.....	8357
TRIP GROUP.....	X218F

\*218F2F is assembled with 218F1, 218F5 and 218F7.

<b>219F—Trip-zag Bar (repeater)</b> .....	219F1F
hinge (front, also valve tappet).....	219F2
" bracket.....	219F3F
" pin.....	219F4
" screw (2).....	219F5
" rivet (2).....	7226
" (rear).....	219F7
" bracket.....	219F8F
" pin.....	219F11
" screw (2).....	247
" rivet (2).....	7226
VALVE TAPPET COVER.....	X219F

\*219F1F is assembled with 219F2, 219F4, 219F7 and 219F11.

<b>220F—Valve (repeater release)</b> .....	220F1
body.....	220F2F
" connector (for pipe) (3).....	220F3
" bracket.....	220F4
" packing piece.....	220F5
" screw (to galley stand) (2).....	220F6
" plug (hanger).....	220F7
" (small).....	2371
" screw (2).....	236
" bushing.....	220F9
" spring.....	220F10
VALVE GROUP.....	X220F

\*220F2F is assembled with 220F1, 220F3, 220F5 to 220F11.

<b>70-Air-pipe Cover (right)</b> .....	8702
<b>80-Air-pipe Cover (left)</b> .....	8805G
guide (for winding spool).....	802
" rivet (4).....	789
" Air-vent Gernon group.....	X805G

\*802G is assembled with 802 to 805. Order by complete symbol X805G.

<b>11G—Paper-Feed Pawl (locking) (upper)</b> .....	11G1
operating link.....	11G3
" pin.....	857
" bushing.....	11G5
" (feeding lower).....	11G6
" connecting link (2).....	11G7
" rivet (2).....	11G8
" spring post.....	872
" spring.....	6299
" arm (part No. 1).....	11G10G
" rivet.....	7174
" (part No. 2).....	11G13
" adjusting screw (2).....	2185
" nut (2).....	33
" screw (2).....	2167
" hub.....	11G11
" Paper-Feed Pawl group.....	X11G

\*11G10G is assembled with 11G11, 11G1 and 11G13.

<b>14G—Paper-feed-pawl Ring</b> .....	14G5G
arm.....	14G6
" rivet (2).....	7776
" Paper-Feed Pawl group.....	X14G
PAPER-FEED-PAWL RING GROUP.....	X14G5

\*14G5G is assembled with 14G6, 14G7 and 14G1. Order by complete symbol X14G5.

<b>19G—Paper-roller-Lower</b> .....	19G3G
pin (eccentric).....	19G4
" nut.....	387
" Paper-roller-Lower group.....	X19G

\*19G3G is assembled with 19G4 and 19G7. Order by complete symbol X19G5.

<b>27G—Patent Plate</b> .....	27G1
screw (4).....	251
PATENT PLATE GROUP.....	X27G

<b>28G—Control Box (repeater paper feed)</b> .....	28G1G
screw (long to piston block).....	2270
" (short to air tower housing).....	28G3
cover (bottom).....	28G4
" connector (for pipe) (3).....	28G19
" plug (2).....	2239
" screw (3).....	236

**24G—Control Box (repeater paper feed) (continued)**

cover (top).....	28G7
" screw (2).....	237
lower.....	28G8
" adjusting screw.....	28G9
" pin.....	28G10
" screw.....	28G11
" pin.....	28G12
" piston (head) (upper).....	28G13
" (lower).....	28G20
" (lock).....	28G14G
" end.....	28G18
" plunger (drifts pressure on 28G20).....	227
" spring.....	28G16
" screw (2).....	249

\*28G1G is assembled with 28G4 to 28G13.

\*28G14G, 28G15 to 28G17, 28G19 and 28G20.

\*28G14G is assembled with 28G18.

<b>29G—Control Plate (quadding) (inner)</b> .....	29G29
" rivet (to shaft) (2).....	725
" (outer).....	29G30
" hub.....	29G31G
" spring.....	6294
" loading pin.....	29G34
" stop pin.....	29G35
" ratchet wheel.....	29G36
" detent spring.....	29G37
" pawl.....	29G38
" lever.....	29G39
" pin (in shaft bracket).....	29G40

\*29G37 is assembled with 29G38, 29G39 and 29G40.

\*29G39 is assembled with 29G38, 29G39 and 29G40.

\*29G40 is assembled with 29G38, 29G39 and 29G40.

\*29G41 is assembled with 29G38, 29G39 and 29G40.

\*29G42 is assembled with 29G38, 29G39 and 29G40.

\*29G43 is assembled with 29G38, 29G39 and 29G40.

\*29G44 is assembled with 29G38, 29G39 and 29G40.

\*29G45 is assembled with 29G38, 29G39 and 29G40.

\*29G46 is assembled with 29G38, 29G39 and 29G40.

\*29G47 is assembled with 29G38, 29G39 and 29G40.

\*29G48 is assembled with 29G38, 29G39 and 29G40.

\*29G49 is assembled with 29G38, 29G39 and 29G40.

\*29G50 is assembled with 29G38, 29G39 and 29G40.

\*29G51 is assembled with 29G38, 29G39 and 29G40.

\*29G52 is assembled with 29G38, 29G39 and 29G40.

\*29G53 is assembled with 29G38, 29G39 and 29G40.

\*29G54 is assembled with 29G38, 29G39 and 29G40.

\*29G55 is assembled with 29G38, 29G39 and 29G40.

\*29G56 is assembled with 29G38, 29G39 and 29G40.

\*29G57 is assembled with 29G38, 29G39 and 29G40.

\*29G58 is assembled with 29G38, 29G39 and 29G40.

\*29G59 is assembled with 29G38, 29G39 and 29G40.

\*29G60 is assembled with 29G38, 29G39 and 29G40.

\*29G61 is assembled with 29G38, 29G39 and 29G40.

\*29G62 is assembled with 29G38, 29G39 and 29G40.

\*29G63 is assembled with 29G38, 29G39 and 29G40.

\*29G64 is assembled with 29G38, 29G39 and 29G40.

\*29G65 is assembled with 29G38, 29G39 and 29G40.

\*29G66 is assembled with 29G38, 29G39 and 29G40.

\*29G67 is assembled with 29G38, 29G39 and 29G40.

\*29G68 is assembled with 29G38, 29G39 and 29G40.

\*29G69 is assembled with 29G38, 29G39 and 29G40.

\*29G70 is assembled with 29G38, 29G39 and 29G40.

\*29G71 is assembled with 29G38, 29G39 and 29G40.

\*29G72 is assembled with 29G38, 29G39 and 29G40.

\*29G73 is assembled with 29G38, 29G39 and 29G40.

\*29G74 is assembled with 29G38, 29G39 and 29G40.

\*29G75 is assembled with 29G38, 29G39 and 29G40.

\*29G76 is assembled with 29G38, 29G39 and 29G40.

\*29G77 is assembled with 29G38, 29G39 and 29G40.

\*29G78 is assembled with 29G38, 29G39 and 29G40.

\*29G79 is assembled with 29G38, 29G39 and 29G40.

\*29G80 is assembled with 29G38, 29G39 and 29G40.

\*29G81 is assembled with 29G38, 29G39 and 29G40.

\*29G82 is assembled with 29G38, 29G39 and 29G40.

\*29G83 is assembled with 29G38, 29G39 and 29G40.

\*29G84 is assembled with 29G38, 29G39 and 29G40.

\*29G85 is assembled with 29G38, 29G39 and 29G40.

\*29G86 is assembled with 29G38, 29G39 and 29G40.

\*29G87 is assembled with 29G38, 29G39 and 29G40.

\*29G88 is assembled with 29G38, 29G39 and 29G40.

\*29G89 is assembled with 29G38, 29G39 and 29G40.

\*29G90 is assembled with 29G38, 29G39 and 29G40.



<b>3C—Air-pin Block</b>	a3C12
screw.....	a3C13
" (5/16"x3/4") (2).....	212 3C4
" (5/8"x3/4") (2).....	211 3C5
" (1/2"x3/4") (2).....	223 3C6
stop pin.....	a3C14
dowel (No. 6x23/4").....	51 3C1
" (No. 6x13/4").....	52 3C2
" (No. 6x1 1/2").....	58 3C3
spring post.....	896 h8C7
<b>Air-pin Block group</b> .....	<b>Xa3C12</b>

\*This Air-pin Block cannot be applied outside of our factory.

<b>4C—Air-pin Plate</b>	b4C3
dowel (3).....	a4C1
screw (1).....	223 a4C2
<b>Air-pin Plate group</b> .....	<b>Xb4C3</b>

<b>5C—Matrix-jaw (front)</b>	b5C4
<b>5C—Matrix-jaw (rear)</b>	a5C4

<b>10C—Matrix-jaw Stop</b> .....	a10C8
rivet (2).....	722 a10C1
<b>Matrix-jaw Stop group</b> .....	<b>Xa10C3</b>

<b>12C—Matrix-jaw Stop Rock (solid)</b> .....	b12C18
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<b>18C—Pin-jaw (front)</b>	a18C8C
stud (for XA36E18).....	835 18C1
nut.....	18C2
" washer.....	417 18C3
<b>Pin-jaw group</b> .....	<b>Xa18C5C</b>
*a18C5C is assembled with 18C1.	

<b>40C—Control Valve</b> .....	40C1
dowel.....	40C2C
" screw (long) to (pin block) (2).....	40C3
" (short) to (pin block).....	40C4
cover (top).....	40C5
" screw (2).....	247 40C6
guide pin (3/16"x3/4").....	7224 40C7
locking plunger.....	40C8
" head.....	40C9
" rivet (3/8"x3/4").....	40C10
" screw (4).....	40C12
" screw (4).....	40C13
" spring.....	40C14
<b>Coarson Valve group</b> .....	<b>X40C</b>
*40C14 is assembled with 40C1, 40C3 to 40C13 inclusive.	

<b>56E—Main Stand</b> .....	a56E51
screw (3).....	36E50
bolt (3/4"x3/4").....	11 36E54
" nut.....	377 36E53
" (5/8"x3/4").....	42 36E56
" (1/2"x2") (3).....	15 36E57
" nut (4).....	377 36E58
brushing (2).....	a36E59
tap pin.....	552 b36E52
main stand group (including air pipes)	Xa36E51

\*Pin size .160 properly annealed and suitable for repairs will be furnished in lengths of not less than one foot.

<b>58E—Matrix-jaw Tongs (rear)</b>	b58E1
connecting link.....	58E5
" pin (2).....	a58E17
lever (front).....	a58E18
" (upper).....	a58E18
" distance piece (2).....	a58E5
link (center).....	a58E10
" pin (center) (2).....	a58E13
" fulcrum pin (2).....	a58E14
" ring (2).....	a58E16
lock slide (2).....	a58E19
" spring (2).....	a58E16
<b>Matrix-jaw Tongs group</b> .....	<b>Xa58E17</b>

\*We cannot furnish separate parts of these Tongs except the Lock Slide a58E15 and Spring a58E16.

<b>56E—Pin-jaw Tongs (rear)</b>	56E1
connecting eye.....	56E2
" (L.H.).....	56E3
" adjusting stud.....	842 56E4
" lock nut 35.....	56E5
" (L.H.).....	56E5
pin (2).....	56E6
lever (front).....	a56E18
" (rear).....	a56E19
" brushing (end) (2).....	56E9
" (center) (2).....	56E10
" washer (end) (4).....	56E11
" (center) (2).....	56E12

### 56E—Pin-Jaw Tongs (rear) (continued)

link (3).....	56E13
" bushing (stud end) (2).....	56E14
" fulcrum pin (2).....	766 56E16
" (lower link at center of 56E19).....	56E16
spring post (in 56E19).....	533 56E17
<b>Pin-Jaw Tongs group</b> .....	<b>Xa56E13</b>

\*We cannot furnish separate parts of these Tongs except the Adjusting Stud 56E13, Lock Nut 56E4, Lock Nut 56E5 and Spring Post 56E17.

<b>57E—Pin-jaw-tongs Spring (inner)</b> .....	a57E9
guide tube.....	a57E10
" eye.....	57E2
" nut.....	57E3
" spring sleeve.....	57E4
" rod.....	57E5
" spring plate.....	57E7
" rivet.....	7161 57E8
<b>Pin-jaw-tongs Spring group</b> .....	<b>Xa57E9</b>

## Electric Melting Pot

Object: To use electricity for heating the metal in the Melting Pot.

**Electric Melting Pot—3000 watts, (1948 style) complete with Partlow temperature control and Control Box for automatic temperature control.** Furnished for 125 or 250 volts, direct or alternating current, and any standard cycles up to 60 inclusive as specified by the purchaser. (60 cycle in stock, lower cycles to order). When ordering complete Pot or renewal parts ALWAYS give COMPLETE ELECTRICAL SPECIFICATIONS.

<b>12H—Melting Pot (3000 watts)</b> .....	b12H12H1
casing.....	a12H13
" plate.....	a12H14
" screw (8).....	220 12H15
" screw (right).....	12H19
" stud (2).....	a12H10
" nut (2).....	a12H11
" washer (2).....	a12H12
" bracket.....	a12H18
" screw (2).....	216 12H19
" dowel (2).....	58 12H20
screw (4).....	259 12H21
heating unit (right).....	a12H40H
" (left).....	a12H41H
" support (2).....	a12H42
" screw (2).....	D2552 12H43
" clamp (2).....	a12H44
" screw (4).....	D2555 12H45
heating unit terminal box.....	a12H46
" cover (front).....	a12H47
" screw (4).....	a12H48
" (back).....	a12H49
" screw (4).....	D2554 12H50
" screw (brags).....	172 12H51
" lock.....	121 12H52
" washer (3).....	485 12H53
" support bracket (to a12H46).....	a12H54
" screw (2).....	a12H55
name plate.....	a12H56
" screw (2).....	251 12H57
temperature control bulb socket.....	a12H58
".....	D2550 12H59
control box.....	a12H60H
" screw (to a12H62) (2).....	D2515 12H61
" bracket.....	a12H62
" set screw.....	D3125 12H63
connector (angle 3/4") (2).....	a12H64
conduit.....	a12H65
wire.....	a12H66
adhesive tape gasket.....	a12H67
insulating powder.....	a12H68
glue.....	a12H69
substance paper.....	a12H70

\*a12H12H1 is assembled with 12H5 to 12H69.

\*a12H40H is assembled with a12H41 to a12H49 inclusive, a12H58 and a12H59.

\*a12H41H is assembled with a12H42 to a12H49 inclusive.

\*a12H50H is assembled with a12H51 to a12H59 inclusive.

\*a12H60H is assembled with a12H61 to a12H69 inclusive.

### 12H—Melting Pot (3000 watts) (continued)

Partlow temperature control.....	72L
mounting bracket.....	a72L3
" screw.....	2138 72L4
" set screw.....	2384 72L5
" wrench.....	71-108
mercury element (30").....	72L11

\*We can supply the mercury element. For any other orders on the Partlow temperature control contact The Partlow Corp., 2 Campion Road, New Hartford, New York.

<b>Renewal Parts For Control Box</b>	Cutter Hammer No.
contactor (4 pole) size (125 amps).....	C81-3387
for AC controller (item 16).....	C84-3387
stationary contacts (8).....	9-404-18
movable contacts (4).....	4231-4
heat insulator (4).....	58-907
movable contact springs (4).....	68-104
copper strip (DC only).....	1319-64
shunt (DC only).....	919-2017

<b>Coil</b>	
for 125 volts 25 cycles AC.....	9-464-17
" 50.....	9-464-5
" 60.....	9-464-1
250.....	9-464-18
" 50.....	9-464-6
" 60.....	9-464-2
125 DC.....	9-464-5
250.....	9-464-6

<b>Resistance Units</b>	
for 125 volts 25 cycles (E-H coils).....	9-377-4
" 50.....	9-377-6
" 60.....	9-377-5
250.....	9-377-7
" 50.....	9-377-7
" 60.....	9-377-7
125 DC.....	9-377-9
" (E-H).....	9-377-7
" 250.....	9-377-15
" (E-H).....	9-377-9

Note: Machines from 1935 to 1948 were equipped with a constant speed motor and dynamic thermometer and the 12H12H1 Melting Pot. When ordering renewal parts ALWAYS give COMPLETE ELECTRICAL SPECIFICATIONS.

Renewal parts for this combination control panel are as follows:

<b>Dynamic Thermometer</b>	Cutter Hammer No.
operating unit.....	28-82
adjustable contact screw (2).....	32-1032
contact clip.....	23-1033
terminal block (2).....	17-647
" bracket.....	79-520
block.....	17-648
terminal screw (3).....	811-7320
clamping screw (2).....	911-3812F1
adjusting screw.....	11-360
bearing plate.....	20-125
post.....	18-812
bearing block assembly.....	41-103-2
hair pin pointer.....	60-521
spring.....	960-120G3
spring.....	960-464
toggle switch.....	61533-4

<b>Contactor No. 531</b>	
(Electric Pot 1955 to 1958 used contactor for AC. This has been discontinued.)	
for AC.....	10-453-8
for DC.....	10-453-11
stationary contacts (8).....	21-368
movable contacts (4).....	4231-4
heat insulator (4).....	58-907
movable contact spring (4).....	68-104
copper strip (DC only).....	1319-64
shunt (DC only).....	919-2017

<b>Coils for No. 366 or 531 Contactor</b>	
125 volt 25 cycle AC (A-B).....	9-464-17
" 50.....	9-464-5
" 60.....	9-464-1
250.....	9-464-18
" 50.....	9-464-6
" 60.....	9-464-2
125 DC.....	9-464-5
250.....	9-464-6

<b>Relay No. 538</b>	
for AC.....	10-286-4
for DC.....	10-286-14

Coil		
125 volt 25 cycle AC	9-642-30	
" 50 "	9-642-16	
" 60 "	9-642-16	
250 " 25 "	9-642-29	
" 50 "	9-642-35	
" 60 "	9-642-35	
125 " 60 "	9-642-35	
250 " 60 "	9-642-19	
250 " "	9-642-23	
Resistance unit (used on all controllers) A-B		
125 volt 25 cycle AC	97-185	
250 " " "	97-185	
125 " 50 "	97-177	
250 " " "	97-180	
125 " 60 "	97-170	
250 " " "	97-181	
125 " DC "	97-180	
250 " DC "	97-185	
Resistance units (used on DC controller only) C-D		
125 volt DC	97-175	
250 " " "	97-178	
Resistance units (used on DC controller only) E-F		
125 volt DC	97-179	
250 " " "	97-180	

NOTE: Machines prior to 1935 were equipped with the 1922 style Electric Motor For. This style For is no longer furnished. Repair parts for this style For will be furnished as long as available. The 1948 style For can be applied in place of the 1922 style For without any other change.

## MOLD INFORMATION

## Composition Molds

Style 3E—4 to 12 point.

Style 3EA—For casting faces 12-point or smaller on bodies 13 or 14 point.

Style 3EH—For casting and composing type from 5 to 12 point with quads and spacers .85" or .857" high as specified, for use in mounting dies directly on quads.

Style 3FC, Short Type—For casting short type on 12 point body from Cellular Matrions, either in composition or as sorts.

Style 3EN—In 14 and 18 point sizes, for use with new style 14 and 18 point composition fonts of .030" deep 2"x.4" and 4"x.4". Machine must be equipped with Display Type Attachment and 14 and 18 point Composition Attachment.

## Sort Casting Molds

Style FD, Short Type Casting—For casting short type from the Display Matrions on 18 point body only.

Style T—With blades for 12, 14 and 18 point (other point size blades special).

Style U—With blades for 24, 30 and 36 point (other point size blades special).

Style TT—Single point size 12 to 22 point.

Style 2U—Single point size 24 to 36 point.

Style 3U—30 and 36 point sizes for casting curved type and high quads and spacers only (requires Corod-Mold Attachment).

Style 4U—Made only in 24-point size. Casts curved type and high quads and spacers only operates with standard Display Type Attachment and does not require the special Corod Mold Operating Equipment.

## Lead and Rule Molds

## For use with Lead and Rule Attachment

Style 2R—1½ to 12 point.

Style 2RA—12 point only, tie-up lead, depth of slot .050".

Style 2RN—Standard point size 6 point, other point sizes to order, column rule.

## Mold Repairs

It is not possible for operators to repair Molds for they have neither the special tools nor necessary training.

If any defects occur in the product produced by a Mold that cannot be corrected by following the directions folder, the complete Mold should be at once returned to us with sample of the defective product; enclose those in the box with the Mold and all of its parts, prepay express charges and write on stating (a) point size, style, and number of Molds; (b) date of shipment and number; (c) details of trouble.

## Names and Symbols of Parts of the Style 3E Mold

\*NOTE: Only the parts indicated by an asterisk (\*) can be applied without returning the Mold to our factory. (See also special note following coupling 1MB3E2 and gate pusher 4MB3E1).

BASE PLATE	1MA3E1
hushing (2)	1MA3E2
" (for 6MA3E3) (2)	1MA3E4
BASE PLATE FRONT ADJUSTMENT	2MA3E1
adjusting screw (left, blank)	2226
" (right, point) (2)	2226
" lock nut (2)	386
SCREW (3)	2223
BASE-PLATE FRONT-ADJUSTMENT NUTS	3MA3E1
SCREW (2)	251
BASE-PLATE-FRONT-ADJUSTMENT SCREW	3MA3E1
BASE-PLATE-GATE-PUSHER CAM	6MA3E4
SCREW (2)	2166
dowel (2)	7104
CHOSE BLOCK	1MB3E1
coupling	1MB3E2
dowel (to 3MB3E1)	2165
SCREW (to adjust 2MB3E1)	2167

†NOTE: The old GATE PUSHER or all broken parts of it must be returned for duplication.

CHOSE-BLOCK GATE BLOCK (right)	2MB3E1
SCREW (front) (2)	2226
" (top) (2)	2228
CHOSE-BLOCK GATE BLOCK (left)	2MB3E1
oil pad (left)	3MB3E2
SCREW (front) (2)	2226
" (top) (2)	2228
CHOSE-BLOCK GATE PUSHER	4MB3E1

†NOTE: The old GATE PUSHER or all broken parts of it must be returned for duplication.

MOLD BLADE (lower) (give point size)	1MC3E1
MOLD BLADE (upper) (give point size)	2MC3E1
carrier	2MC3E2
" spring pin	895
" latch	2MC3E5
" fulcrum pin	2MC3E6
" spring	6213
" eye (2)	2MC3E14
" lever	2MC3E12
" fulcrum pin	2MC3E13
" pin (also for 2MC3E9)	2MC3E15

†NOTE: If Spring 2MC3E7 is wanted assembled with its two Eyes 2MC3E14 order as Spring 2MC3E7M.

MOLD-BLADE-CARRIER GUIDE BLOCK	3MC3E1
SCREW	2MC3E2
" washer	440
MOLD-BLADE STOP	7MC3E1
SCREW (2)	2166
" washer (2)	440
MOLD-BLADE TOP GUIDE	8MC3E1
SCREW (2)	2208
MOLD-BLADE SHOE (for 1MC3E1)	9MC3E1
SCREW	2206
MOLD-BLADE SHOE (for 2MC3E1)	10MC3E1
SCREW (4)	2208

MOLD-BLADE GUIDE (left)	18MC3E1
SCREW	2218
TYPE BLOCK (right)	1MD3E1
oil pad (left)	1MD3E5
plug screw (thru)	2225
" (base)	2219
SCREW (bottom, from 1MA3E1) (2) (2)	1MD3E11
" (rear, from 9MD3E1) (2)	2220
" (right, to 9MD3E1)	2217

TYPE BLOCK (left) (specify point size)	1MD3E2
plug screw	2220
SCREW (bottom, from 1MA3E1)	2229
" (rear, from 9MD3E1)	2228
" (right, to 9MD3E1)	2227
TYPE-BLOCK GATE KNOCK OFF	6MD3E1
SCREW (2)	250
TYPE-BLOCK SQUARING PLATE	9MD3E1
plug screw	2219
" (base)	2218
" (to 1MA3E1) (5)	2163

## Names and Symbols of Parts of the Style 2E Mold

(The manufacture of Style 2E Molds has been discontinued. This mold will be furnished as long as available.)

\*NOTE: Only the parts indicated by an asterisk (\*) can be applied without returning the Mold to our factory. (See also special note following Coupling 1MB2E2 and Gate Pusher 4MB2E1.)

BASE PLATE	1MA2E1
hushing (2)	1MA2E2
" (for 6MA2E3) (2)	1MA2E4
BASE-PLATE FRONT ADJUSTMENT	2MA2E1
adjusting screw (left, blank)	2226
" (right, point) (2)	2226
" lock nut (2)	386
SCREW (3)	2223
BASE-PLATE-FRONT-ADJUSTMENT NUTS	3MA2E1
SCREW (2)	251
BASE-PLATE-FRONT-ADJUSTMENT SCREW	3MA2E1
BASE-PLATE-GATE-PUSHER CAM	6MA2E1
SCREW (2)	2166
dowel (2)	7104
CHOSE BLOCK	1MB2E1
coupling	1MB2E2
dowel (to 3MB2E1)	2165
SCREW (to adjust 2MB2E1)	2167

†NOTE: If the CHOSE-BLOCK Coupling 1MB2E2 is broken, this part can be replaced by returning to us the parts of the Coupling, provided these are in such condition that the required measurements can be obtained from them.

CHOSE-BLOCK GATE BLOCK (right)	2MB2E1
SCREW (front) (2)	2226
" (top) (2)	2228
CHOSE-BLOCK GATE BLOCK (left)	2MB2E1
oil pad (left)	3MB2E2
SCREW (front) (2)	2226
" (top) (2)	2228
CHOSE-BLOCK GATE PUSHER	4MB2E1

†NOTE: The old GATE PUSHER or all broken parts of it must be returned for duplication.

MOLD BLADE (lower) (give point size)	1MC2E1
MOLD BLADE (upper) (give point size)	2MC2E1
carrier	2MC2E2
" spring pin	895
" latch	2MC2E5
" fulcrum pin	2MC2E6
" spring	6213
" eye (2)	2MC2E14
" lever	2MC2E12
" fulcrum pin	2MC2E13
" pin (also for 2MC2E5)	2MC2E15

†NOTE: If Spring 2MC2E7 is wanted assembled with its two Eyes 2MC2E14 order Spring 2MC2E7M.

MOLD-BLADE-CARRIER GUIDE BLOCK	3MC2E1
SCREW	2MC2E2
" washer	440
MOLD-BLADE STOP	7MC2E1
SCREW (2)	2166
" washer (2)	440
MOLD-BLADE TOP GUIDE	8MC2E1
SCREW (2)	2208
MOLD-BLADE SHOE (for 1MC2E1)	9MC2E1
SCREW	2206
MOLD-BLADE SHOE (for 2MC2E1)	10MC2E1
SCREW (4)	2208

TYPE BLOCK (right)	1MD2E1
oil pad (left)	1MD2E5
plug screw (thru)	2225
" (base)	2219
SCREW (bottom, from 1MA2E1) (short) (2)	2220
" (rear, from 9MD2E1) (2)	2221
" (right, to 9MD2E1) (long)	2217
" (left, to 9MD2E1) (long)	2218

TYPE BLOCK (left) (to 8 p.d.)	2MD2E2
(left) (9 to 12 p.d.)	2MD2E2
plug screw (thru)	2225
SCREW (bottom, from 1MA2E1) (short)	2220
" (rear, from 9MD2E1) (long)	2221
" (right, to 9MD2E1) (long)	2217
" (left, to 9MD2E1) (long)	2218
TYPE-BLOCK GATE KNOCK OFF	6MD2E1
SCREW (2)	250
TYPE-BLOCK SQUARING PLATE	9MD2E1
plug screw	2219
" (base)	2218
" (to 1MA2E1) (5)	2163

### Names and Symbols of Parts of the Styles T, 2T, U, 2U, 3U and 4U Molds

When ordering be sure to specify style of MOLD.  
The symbols here given are for the T MOLD.  
All parts which can be furnished for applying to a MOLD  
outside our factory are designated by an asterisk (\*) follow-  
ing the symbol. (See also special note following CROSS-  
BLOCK COUPLING 1MB1T2, MOLD-BLASE STOP 7MC1T1  
and CATH PUSHER 4MB1T1).

For U Molda change

BARB-PLATE.....	1M1A1T1
bushing (short).....	1M1A1T2
= (long).....	1M1A1T3
BARB-PLATE FRONT ARBUMENT.....	2M1A1T
adjusting screw (2).....	2M1A1T2
= (right, pointed).....	2M1A1T3
= lock nut (2).....	2M1A1T4
SCREW (3).....	2M1A1T5
BARB-PLATE-FRONT-ARBUMENT NUT.....	
PLATE.....	3M1A1T1
SCREW (2).....	3M1A1T2
BARB-PLATE-FRONT-ARBUMENT PACKING.....	
BLANK.....	4M1A1T1
BARB-PLATE-FRONT-ARBUMENT SHOE.....	6M1A1T1
BARB-PLATE-GATE-PURIFIER CAM.....	6M1A1T1
SCREW (3).....	2M1A1T5
CRACKING BLOCK.....	1M1B1T1
coupling screw.....	2M1A1T5
dowel (to 3M1B1T1).....	1M1B1T4
screw (to adjust 3M1B1T1).....	2M1A1T5
= (to the CRACK-BLOCK COUPLING 1M1B1T1 (2) 1M1B1T2) of broken this part can be replaced by returning to us the broken pieces of the COUPLING, provided these broken pieces are in such condition that the required measurements can be obtained from them.	
CRACK-BLOCK GATE BLOCK (right).....	2M1B1T1
SCREW (4).....	2M1A1T2
CRACK-BLOCK GATE BLOCK (left).....	3M1B1T1
oil pad (felt).....	3M1B1T2
SCREW (4).....	2M1A1T2
CRACK-BLOCK GATE PLATE.....	4M1B1T1
(NOTE: The old GATE PURIFIER or all broken parts of it must be returned for duplication.)	
MOLD-BEAD (bottom) (give point-size).....	1M1C1T1
MOLD-BEAD (top) (give point-size).....	2M1C1T1
MOLD-BEAD POINT BLOCK (give point-size).....	3M1C1T1
MOLD-BEAD STRIP.....	2M1C1T2
MOLD-BEAD STRIP.....	7M1C1T1
SCREW (2).....	2M1A1T2
(NOTE: If the MOLD-BEAD STRIP PLATE 7M1C1T1 is broken this part can be replaced by returning to us the broken pieces of the Strip, provided these broken pieces are in such condition that the required measurements can be obtained from them.)	
MOLD-BEAD TOP COVER (designate point-size of MOLD-BEAD).....	8M1C1T1
SCREW (2).....	2M1A1T2
MOLD-BEAD LEVER (lower).....	12M1C1T1
(upper).....	12M1C1T2
spring.....	6M1C1T2
= box.....	12M1C1T3
= pin.....	12M1C1T4
= plug.....	12M1C1T5
MOLD-BEAD-LEVER FULCRUM STUD.....	13M1C1T1
MOLD-BEAD-LEVER-SPRING-ROCK PLATE.....	14M1C1T1
SCREW (2).....	2M1A1T2
(= (5).....	2M1A1T3
pin (for 3M1D1T1).....	1M1D1T1
SCREW (from 9M1D1T1, short).....	2M1D1T1
= (from 9M1D1T1, long).....	2M1D1T2
= (from 1M1A1T1, long).....	2M1D1T3
= washer (4).....	2M1D1T4
= (from 1M1A1T1, short).....	2M1D1T5
pin (for 3M1D1T1).....	2M1D1T6
SCREW (from 1M1A1T1) (3).....	2M1D1T7
= (from 3M1D1T1, #7-67).....	2M1D1T8
= (from 3M1D1T1, #7-67).....	2M1D1T9
nick pin.....	2M1D1T10
= plug.....	2M1D1T11
TYPE-BLOCK CLAMP BOLT.....	3M1D1T1
nut.....	3M1D1T2
spring.....	3M1D1T3
washer.....	3M1D1T4
TYPE-BLOCK CLAMP-BOLT SCREW.....	3M1D1T5

**Styles T, 2T, U, 2U, 3U and 4U Molds (continued)**

adjusting screw (6).....	2159..	9MD1T2
bushing (1/4 long).....		9MD1T4
" (1/2 long).....		9MD1T9
" (2).....		9MD1T10
plug screw (3).....	2235..	9MD1T6
screw (2) (from 1MA1T1).....	2161..	9MD1T8

### Names and Symbols of Parts of the Continuous Strip Molds

This list applies to Style R, RA, RB, 2R, 2RA, and 2RB Motors shipped after 1918—the improved parts which differ from the R Motor being listed at the end of this section.

All parts which can be furnished for applying to a Moen outside our factory are designated by an asterisk (\*) (see also special note following MOEN-BLASE C&F 411MC) (see

RAV. PLATE	1	11MA1R1
bushing (2)		11MA1R2
plug screw (4)	228	11MA1R3
NUTS PLATE		3MA1R1
screw (2)	251	3MA1R2
CLAMP SCREW		7MA1R1
bushing		7MA1R2
lever		7MA1R3
lock nut	324	7MA1R4
pressure die		7MA1R5
" key		7MA1R6
FRIGHTY BLOCK		9MA1R1
"		9MA1R2
release screw		9MA1R4
" nut		9MA1R5
" wash	428	9MA1R6
" spring	622	9MA1R7
plug screw		9MA1R8
screw		9MA1R9
washer (2)	438	9MA1R8
trimmer		9MA1R9
trimmer plate (give position)		9MA1R10
screw (2)	232	9MA1R11
TIE BARS (left)		110MA1R1
TIE BARS (right)	224	110MA1R2
TIE BARS (left)		111MA1R1
screw (2)	2213	111MA1R2
TIE FOR 154-post (right) - R		111MA1R3

MOLD BLADE (high, give point-size and height).....	a1MCIR1
MOLD BLADE (low, give point-size and height).....	a2MCIR1
†For Style RA MOLDS.	
MOLD BLADE (give point-size and height).....	1MCIRA

MOLD-BLADE CAP (give height of lead and point size).....11MC1R1 ††  
support.....11MC1R2  
††For Style RB Molds.  
MOLD-BLADE CAP (give height of lead and point size).....11MC1R1 †  
†NOTE: If the MOLD-BLADE CAP used in casting low leads, is broken, this part can be replaced by returning to us the broken pieces of the CAP together with MOLD-BLADE CAP SUPPORT, provided these broken pieces are in such condition that the required measurements can be obtained from them.

MOULD-PLATE JOINT BLOCK (lower).....	5MC1R1	
(upper).....	5MC1R2	
bushing (in 5MC1R2).....	5MC1R3	
MOULD-PLATE STOP.....	7MC1R1	
screw (2).....	2296	7MC1R2
bushing (2).....		5MC1R1
MOULD-PLATE SHOE (2).....	9MC1R2	
screw (4).....		1MD1R1
TOP PLATE (res. cap).....		1MD1R6
bushing (2).....		1MD1R7
plug screw (5).....	2299	1MD1R7
screw (to 5H1A1R1, bottom).....	2161	1MD1R1
* (from bi5A1R1, side) (2).....		1MD1R2
* (from 5H1A1R1, side) (2).....		1MD1R3
* (between 5MC1R1 and 2) (5).....		1MD1R4
*.....	335	1MD1R4

```

Tree Block (rear, large) .....a1MDIR1a
bushing (2) .....a1MDIR1a16
$For Style RB Monza
Tree Block (rear, large) .....a1MDIR1a
$For 1½-point "R" Monza
Tree Block (rear) .....a1MDIR17

Tree Block (front, upper) .....a2MDIR1 $
(front, lower) .....a2MDIR1 $
plug screw (in a2MDIR1) (3) .....2239 a2MDIR5 *
      (in a2MDIR13) (3) .....2230 a2MDIR4 *
screw (to b1MAIR1) .....2161 a2MDIR7

```

### Continuous Strip Molds (continued)

bushing (in a2MDIR13) (2) .....	a2MDIR18
(in a2MDIR13) (2) .....	a2MDIR19
neww (bottom) (2) .....	2166 2MDIR8
(suds) (4) .....	249 2MDIR9
(suds) (4) .....	242 2MDIR10
(top) .....	435 2MDIR16
vent pusher .....	a2MDIR17

†NOTE: The old Vent Pusher or all broken parts of it must be returned for duplication.

‡For 1½-point "E" Moulds

Top Back (front, upper) .....	a2MDIR20
Top Back (front, lower) .....	a2MDIR21

‡For Style RB Moulds

Top Back (front, upper) .....	a2MDIRR1
Top Back (front, lower) .....	a2MDIRR1

TYPE-BLOCK MATRIX ADJUSTMENT... 10MD1R1 †15  
SCREW..... 233 10MD1R2 \*

‡For Style RB MOLES.  
 TYPE-BLOCK MATRIX ARGUMENT. .... 10MD1RB1  
 §For 1½-point "R" MOLES.  
 TYPE-BLOCK MATRIX ARGUMENT. .... §10MD1R4

TYPE-BLOCK MATRIX CLAMP.....	11MD1R1	#1
screw.....	2225	#11MD1R2
sleeve.....		#11MD1R3
spring.....	6182	#11MD1R4
abutment (lower).....		#11MD1R5

+For Style RB Molds  
 TYPE-BLOCK MATRIX CLAMP ..... 11MD1RB1  
 matrix packing piece (under Matrix) (specify point size opening wanted) ..... 11MD1RB7  
 packing piece (above Matrix) ..... 11MD1RB10  
 Style 1RB Molds prior to No. 452 were not equipped with  
 PACKING PIERCE 11MD1RB10, but had an extra CLAMP  
 11MD1R1 to be used only for leads below .885". This extra  
 CLAMP may be discarded if PACKING PIERCE 11MD1RB10  
 ordered.

TYPE-BLOCK MATRIX CLAMP. ....11MD1R9

TYPE-BLOCK PACKING BLOCK (give point  
size)..... 12MD1R1

TYPE-BLOCK RETAIL.....13MD1R1

For all 1 1/4-point Style 1R Molds.....

TYPE-BLOCK FACING.....	a14MD1R1
TYPE-BLOCK FACING BRUSHED.....	a14MD1R2

The following new and improved parts in the 2 Molds differ from corresponding parts in R Mold

BASE PLATE.....	b1MA2R1
bushing.....	a1MA2R2
nozzle nut.....	a1MA2R8
* screw (2).....	1MA2R9
* washer (2).....	1MA2R14
bushing.....	1MA2R15
NUMBER PLATE.....	3MA2R1
MOLD-SLIDE POINT BLOCK (upper)	a5MC2R2
bushing (2).....	a5MC2R3
TYPE BLOCK (rear) (large)	a5MD2R1
TYPE BLOCK (front) (upper)	a5MD2R1
(chug screws) (5).....	2229
bushing (front) (upper) (2)	a2MD2R13
* (front) (lower) (2)	2MD2H14
TYPE BLOCK (lower) block	a2MD2R19
bushing (2).....	a2MD2R1
	a2MD2R2

†NOTE: This Nozzle Seat has an apron projecting through the Base Plate. To apply it to Style 2R Molds built prior to 12-22-27 (which were equipped with a flat Nozzle Seat) MA2R8 and Filenco Piece b1MA2R17) the Mold must be returned to our factory.

### Names and Symbols of Parts of the Style FC and FD Molds

The names in the following list are alike for both FC and FD Moans but the symbols differ; when ordering a part, a 2FC Moan change the letters "FC" to "2FC" in the symbol, when ordering a part for the FD Moan change the letters "FC" to "FD" in the symbol.

All parts which can be furnished for applying to a MG outside our factory are marked with an asterisk (\*) (See a special note following CROSS-STOCK COUPLING 1MB2FC

## Style FC and FD Molds (continued)

For 2FC Molds change Letters FC to 2FC	
For FD Molds change Letters FC to FD	
BASE PLATE.....	1MMPF2
bushing (for water-way) (2).....	1MMPF2
" (for 5MMPF3) (2).....	1MMPF2
BASE-PLATE FRONT ADJUSTMENT.....	2MMPF1
adjusting screw (left, blue).....	2MMPF2
" (right, pointed).....	2MMPF3
" lock nut (2).....	2MMPF4
screw (3).....	2MMPF5
BASE-PLATE-FRONT-ADJUSTMENT NUTS.....	2MMPF1
PLATE.....	2MMPF2
screw (2).....	2MMPF3
BASE-PLATE-FRONT-ADJUSTMENT SCREWS.....	2MMPF1
BASE-PLATE.....	2MMPF2
screw (2).....	2MMPF3
dowel (2).....	2MMPF4
CRASS BLOCK.....	1MMPF1
coupling.....	1MMPF2
screw.....	1MMPF3
screw (4).....	1MMPF6
(H) THE CRASS-BLOCK COUPLING 1MMPF2 is broken; this part can be replaced by returning to us the piece of the Coupling provided these are in such condition that the required measurements can be obtained from them.	
CRASS-BLOCK GATE BLOCK (right).....	2MMPF1
oil pad.....	2MMPF6
plug screw (2).....	2MMPF3
screw (front) (2).....	2MMPF3
" (top) (2).....	2MMPF4
CRASS-BLOCK GATE BLOCK (left).....	2MMPF1
oil pad.....	2MMPF6
screw (front) (2).....	2MMPF3
" (top) (2).....	2MMPF4
CRASS-BLOCK-GATE-BLOCK SQUARE PLATE 5MMPF1	
screw (3).....	2MMPF5
CRASS-BLOCK GATE PUSHER.....	2MMPF1
MOLD BLADE.....	1MMPF1
MOLD-BLADE GUIDE (right).....	1MMPF1
" (bottom).....	1MMPF2
plug screw.....	2MMPF3
" (rear).....	2MMPF4
" (bottom).....	2MMPF5
MOLD-BLADE GUIDE (left).....	1MMPF1
screw (bottom).....	2MMPF3
" (rear).....	2MMPF4
" (bottom).....	2MMPF5
MOLD-BLADE SHOE.....	1MMPF1
screw (2).....	2MMPF3
TYPE BLOCK (right).....	1MMPF1
" (bottom).....	1MMPF2
TYPE BLOCK (left).....	1MMPF1
screw.....	2MMPF3
TYPE-BLOCK SQUARE PLATE.....	2MMPF3
plug screw (2).....	2MMPF3
plug screw (3).....	2MMPF3
screw (3).....	2MMPF3
" (2).....	2MMPF3
" (3).....	2MMPF3
LINE STANDARD.....	1MMPF1

## Miscellaneous Supplies

PICA GAGE (20 pieces) (2).....	7L1
(6 " ).....	7L2
(4 " ).....	7L3
(3 " ).....	7L4
(2 " ).....	7L5
(1 " ).....	7L6
(1/2 " ).....	7L7
(1/4 " ).....	7L8
board.....	7L9

## Miscellaneous Supplies (continued)

board hook (10).....	7L10
" screw eye.....	7L11
screw standard (2 pieces).....	7L12
" (1 1/2 point).....	7L13
" (1 point).....	7L14
" 1-2 (point).....	7L15
" (.008").....	7L16
" washer.....	7L17
" 7/16.....	7L18
PICA GAGE complete.....	XYL
7L10 is assembled with 7L10 and 7L11	
7L12 is assembled with 7L13 to 7L18 inclusive.	
SCHEMERS, FOR USE AT METAL POT.....	X8L
PUMP ARM DRILL.....	9L1
BOXES FOR CELLULAR MATRICES (Providing having metal partitions providing 225 compartments for 4" x 2").....	X10L
LINE STANDARD (regular).....	2L11
SCREWDRIVERS (4" x 1-8").....	2L11
(7 1/2" x 1-4").....	2L12
(7 1/2" x 3-8").....	2L13
(3" x 3-16").....	2L14
(6" x 5-16").....	2L15
(10" x 5-8" heavy).....	2L16
LIMING GLASS.....	2L17
case.....	2L19
stand.....	2L21
type glass.....	2L21
knife edge.....	2L21
" shoe (right).....	2L21
" (left).....	2L21
" screw (8).....	2L21
micrometer screw.....	2L21
" bearing.....	2L21
" collar.....	2L21
" graduated ring.....	2L21
" spring.....	2L21
Post.....	2L21
bracket.....	2L21
" clamp screw.....	2L21
" clip.....	2L21
guide tube.....	2L21
" screw (2).....	2L21
LIMING GLASS (complete with case).....	2L21
2L21 is assembled with 2L21, 2L21, 2L21 and 2L21.	
Only parts which will be furnished separately. If other parts are injured the Gage must be returned to Philadelphia for repair.	
MOLD GUN.....	X8L
AUTOMATIC HEAT CONTROL FOR CAS.....	5L1L
bracket.....	5L1L
" screw (2).....	5L1L
" 5L1L is assembled with 5L1L, 5L1L and 5L1L.	
NOZZLE VENT TUBE HOLDER.....	6L1
OIL CAN (Large).....	70L3
OIL CAN (Medium).....	70L2
WRENCHES.....	
No. 81 (1 1/2").....	
No. 82 (5-16" x 13-32").....	
No. 83 (13-32" x 1-2").....	
No. 84 (2-8" x 3-4").....	
No. 85 (18-16" x 7-8").....	
No. 86 (7-32" sq. x 1-2" hex).....	
No. 87 (Spanner, 1" diam.).....	
No. 88 (Spanner, 3-4" diam.).....	
No. 89 (Spanner, 1-1/8" diam.).....	
No. 90 (9-32" x 5-16").....	
No. 82S (Pin, 60" head).....	
No. 82S (Spanner, 1 1/2" diam.).....	
No. 8118 (Set Screw).....	

## Miscellaneous Supplies (continued)

ALUMINUM STONE (white) 1/2" x 1/4" x 3/16".....	
AUTOMATIC METAL FEEDER (Margach).....	
with one input mold.....	
AUTOMATIC METAL FEEDER (Blair) with one input mold.....	
AUTOMATIC METAL FEEDER ISOMET MOLD, special thin input size.....	
BOXES FOR CELLULAR MATRICES (Wooden) with compartments providing for 225 4" x 2" matrices.....	
BOXES FOR DISPLAY MATRICES, hold 83 matrices each in a separate compartment with space for line standard.....	
CARTON PLATE BOOK.....	
CASTING MACHINE ADJUSTMENT BOOK.....	
CORE HOLE CLEANER.....	
DRILL, No. 30.....	
" 30.....	
" 60.....	
*We furnish only high speed drills.	
FILE, 4" narrow pillar.....	
" 6" hand smooth flat.....	
Ladle, Small For Melting.....	
MELTING FURNACE LADLER—SPECIAL:.....	
6-inch bowl, 15 pound capacity, with spout.....	
6-inch bowl, 15 pound capacity, without spout.....	
8-inch bowl, without long spout.....	
10-inch bowl, without long spout.....	
MELTING FURNACE SKIMMER—SPECIAL:.....	
5-inch, with iron handle, 34" overall.....	
6-inch, with iron handle, 42" overall.....	
METAL CLEANER: Not a flux to take the dross off the top of molten metal, but a cleaner that takes the dirt and impurities out of the metal, 2 lb. can.....	
METAL CLEANING ROOF, for Mono-Metal Cleaners.....	X50L
MONOTYPE CONTROLLER PAPER: The flexible connection between the Keyboard and the Composing Machine, packed in cases containing about 100 lb.	
MONOTYPE LOOSE LEAF SPECIMEN BOOK.....	
MOTOR BEAT for casting machine motor, 88" x 1 1/4" endless.....	
NOZZLE LOW: A dross detector for Nozzles, makes drilling easier and reduces dirt breakage. Useful also in feeding Pump Plastics. Box contains 12 pieces.	
Nozzle threads in Pump Body.....	
OIL, RELS MOLD: A very special oil which exhaustive tests have proved to be the most satisfactory lubricant for all our Continuous Strip Molds, and all Mobile casting core type and material. No other lubricant will preserve the Molds and give as good a product. Sold in 2 gallon metal containers.....	
OIL, TYPE MOLD: A suitable oil for Mono-type Molds, which work at high temperature and high speed, is essential. After much experience we have found this oil best for all Molds which compose or cast type without a core. This Mold Oil is of proven body for lubricating the Casting Machine. Sold in 2 gallon containers.....	
PIESER, PIR, 10".....	
" (flat nose, parallel jaws).....	
" long flat nose (5").....	X60L
STEEL EM SCALE.....	
TAP, HAND (3/4") 13 thread (for cleaning).....	
TAPPING CLOTH REMOVER.....	
TWEEDERS.....	

Waiting for Inspiration, rushing things  
in reliance upon Inspiration, and all the rest  
of it, are a lazy man's habits. Get the bones of  
the work well into your head, and the tools  
well into your hand, and get on with your job,  
and the Inspiration will come to you: *if you're  
worth a tinker's damn as an artist, that is!*

**BULMER, 462**

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**BEMBO, 405**

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worth a tinker's damn as an artist, that is!*

**DEEPDENE, 315**

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**JANSON, 401**

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